

November 13, 2014

083-82734.38

Mr. Jeff Koerner  
Florida Department of Environmental Protection  
Division of Air Resource Management  
2600 Blair Stone Road, MS 5500  
Tallahassee, FL 32399-2400

**RE: TITLE V PERMIT RENEWAL APPLICATION  
BLOWERS, FLARES, CONTROLS, AND ELECTRIC DISTRIBUTION  
J.E.D. SOLID WASTE MANAGEMENT FACILITY  
OSCEOLA COUNTY, FLORIDA  
FACILITY ID 0970079**

Dear Mr. Koerner,

On behalf of Omni Waste of Osceola County, LLC (Omni), a subsidiary of Waste Services Inc. (WSI), Golder Associates Inc. (Golder) is submitting this Title V Operating Permit Renewal Application for the J.E.D. Solid Waste Management Facility (JED Facility) in Osceola County, Florida. The facility's current Title V Permit expires on June 30, 2015 and the renewal application is due to the Florida Department of Environmental Protection (FDEP) 225 days prior to the expiration date (November 17, 2014).

## Background

This application serves to renew the expiring Title V Operation Permit (Air Permit No. 0970079-009-AV). Omni recently received an air construction permit (Air Permit No. 0970079-011-AC/PSD-FL-429) which authorized expansion of the total landfill capacity to an estimated 81.5 million tons with new cells 11-23 (EU005). Since the landfill expansion is a continuous construction process, this application proposes to incorporate new emission unit (EU005) into the Title V Permit. The remainder of the recently permitted emission units will be added to the Title V Operating Permit once construction is completed for the affected emission unit. No changes are proposed to the existing permitted emission units EU001 and EU002. The following table summarizes the currently permitted emission limits at the facility (note that EU005 has no associated numerical pollutant emission limits).

<b>POLLUTANT</b>	<b>PERMIT LIMIT* (ton/yr)</b>
SO <sub>2</sub>	249
PM/PM <sub>10</sub>	12
VOC	17
NO <sub>x</sub>	48
CO	249

\*Note that the permitted emission limit is based upon a consecutive 12-month period updated monthly.

In addition to the pollutant emission limits, the facility also has limits on the waste acceptance rate (on an annual basis) and total waste placement (through Cell 10 – Solid Waste Construction Phases I through III). The following table illustrates the historical waste acceptance rates (based upon actual tonnages received at the facility). Note that the facility was limited to 2,631,200 tons per year and the total capacity





was limited to 16.2 million tons of waste in Solid Waste Phases I through III.

Year	Actual Waste Acceptance Rate (ton/yr)*
2004	459,963
2005	824,242
2006	1,538,316
2007	1,696,391
2008	1,287,561
2009	1,010,584
2010	1,768,755
2011	1,666,392
2012	1,481,630
2013	1,587,548

\*Permitted waste acceptance limit is 2,631,200 tons per year.

As can be seen for all years thus far, the actual waste acceptance rate was significantly less than the permitted limit and the total combined waste capacity (in place) was 13.6 million tons meeting the permit limit of 16.2 million tons. This reduced historical waste acceptance rate may lead to reduced emissions when compared to the original Title V Permit application.

As described above, Omni recently completed the permitting process to allow continued waste acceptance beyond Cell 10. Air Permit No. 0970079-011-AC/PSD-FL-429 authorizes EU005 to increase the permitted capacity to an estimated 81.5 million tons of waste and development of Cells 11 through 23.

### Requested Changes to the Title V Permit

As discussed above, EU005 is requested to be added to the Title V Permit. In addition to the above mentioned items, EU004 (ASR Unit) has been permanently shutdown and removed from the facility, thus this emission unit should be removed from the Title V Permit. Omni notified FDEP on November 29, 2013 of the shutdown of EU004.

### Alternative Sampling Procedures

Omni has applied and received approval (from FDEP) for several alternative sampling procedures (ASPs) for elevated extraction well temperatures. Omni follows the procedures allowed in each approval for operational and compliance purposes. Additional ASP requests and approvals are typically documented in the semi-annual NSPS reports (submitted by January 30<sup>th</sup> and July 30<sup>th</sup> each year). The table below summarizes the approvals received.



<b>ITEM</b>	<b>APPROVAL DATE</b>
<b>Authorization to operate GW-2, GW-12, GW-13, GW-20, and GW-39 at a maximum temperature of 145°F</b>	<b>March 19, 2009</b>
<b>Authorization to operate GW-4, GW-24, GW-26, GW-43, GW-47, GW-49, GW-53, GW-57, and GW-59 at a maximum temperature of 145°F Authorization to operate GW-60 at a maximum temperature of 150°F</b>	<b>May 4, 2009</b>
<b>Authorization to operate GW-6 at a maximum temperature of 145°F</b>	<b>September 16, 2009</b>
<b>Authorization to operate GW-40 at a maximum temperature of 145°F</b>	<b>February 24, 2010</b>
<b>Authorization to operate GW-60 at a maximum temperature of 150°F</b>	<b>June 8, 2010</b>
<b>Authorization to operate GW-04R, GW-27, GW-30, GW-33, and GW-40R at a maximum temperature of 145°F and authorization to operate GW-60A at a maximum temperature of 150°F</b>	<b>December 15, 2010</b>
<b>Authorization to operate GW-18, GW-35, GW-45, GW-50, and GW-54 at a maximum temperature of 145°F</b>	<b>September 22, 2011</b>
<b>Authorization to operate GW-67 at a maximum temperature of 145°F</b>	<b>March 12, 2012</b>
<b>Authorization to operate GW-14R1, GW-15R2, GW-22, GW-28, and GW-30R1, GW-58, GW-61, GW-64, GW-65, GW-68, GW-70, GW-89, and GW-92 at a maximum temperature of 145°F</b>	<b>July 7, 2012</b>
<b>Authorization to operate GW-28 at a maximum temperature of 160°F</b>	<b>April 22, 2013</b>
<b>Authorization to operate GW-28B, GW-31, GW-87, GW-93, and GW-94, GW-97, GW-98, GW-101, GW-105, HGC-01, HGC-02, HGC-04, HGC-06, HGC-07, and HGC-08 at a maximum temperature of 150°F</b>	<b>August 29, 2013</b>
<b>Authorization to operate HGC-03 at a maximum temperature of 150°F</b>	<b>June 30, 2014</b>



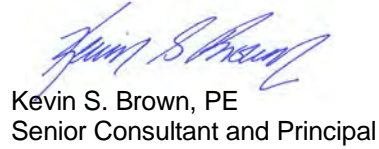
If you have any questions, please feel free to give contact Mr. Mike Kaiser at (904)673-0446 or the undersigned at (904)363-3430.

Sincerely,

**GOLDER ASSOCIATES INC.**



Don E. Grigg, PE  
Senior Engineer



Kevin S. Brown, PE  
Senior Consultant and Principal

DEG/KSB

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**TITLE V PERMIT RENEWAL APPLICATION  
J.E.D. SOLID WASTE MANAGEMENT FACILITY  
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**ATTACHMENT A**

**APPLICATION FOR AIR PERMIT – LONG FORM #62-210.900(1)**





# Department of Environmental Protection

## Division of Air Resource Management

### APPLICATION FOR AIR PERMIT - LONG FORM

#### I. APPLICATION INFORMATION

**Air Construction Permit** – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

**Air Operation Permit** – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

**To ensure accuracy, please see form instructions.**

#### Identification of Facility

1. Facility Owner/Company Name: <b>Omni Waste of Osceola County, LLC</b>	
2. Site Name: <b>J.E.D. Solid Waste Management Facility</b>	
3. Facility Identification Number: <b>0970079</b>	
4. Facility Location... Street Address or Other Locator: <b>1501 Omni Way</b> City: <b>St. Cloud</b> County: <b>Osceola</b> Zip Code: <b>34773</b>	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

#### Application Contact

1. Application Contact Name: <b>Don E. Grigg</b>	
2. Application Contact Mailing Address... Organization/Firm: <b>Golder Associates Inc.</b> Street Address: <b>9428 Baymeadows Road, Suite 400</b> City: <b>Jacksonville</b> State: <b>Florida</b> Zip Code: <b>32256</b>	
3. Application Contact Telephone Numbers... Telephone: <b>(904)363-3430</b> ext. Fax: <b>(904)363-3445</b>	
4. Application Contact E-mail Address: <b>dgrigg@golder.com</b>	

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	3. PSD Number (if applicable):
2. Project Number(s):	4. Siting Number (if applicable):



## APPLICATION INFORMATION

### Purpose of Application

**This application for air permit is being submitted to obtain: (Check one)**

#### **Air Construction Permit**

- ☐ Air construction permit.
- ☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- ☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

#### **Air Operation Permit**

- ☐ Initial Title V air operation permit.
- ☐ Title V air operation permit revision.
- ☒ Title V air operation permit renewal.
- ☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- ☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

#### **Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)**

- ☐ Air construction permit and Title V permit revision, incorporating the proposed project.
- ☐ Air construction permit and Title V permit renewal, incorporating the proposed project.

**Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:**

- ☐ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

### Application Comment

**This permit application serves to renew the expiring Title V Operation Permit for the facility, which expires on June 30, 2015. Omni Waste requests removal of EU004 (ASR Recycling System) which been shutdown and removed from the facility. Omni Waste also requests adding the New MSW Class I landfill (expansion) with Gas Extraction Cells 11-23 (EU005) authorized under air construction permit No. 0970079-011-AC/PSD-FL-429 in the renewed Title V Permit (please note that the landfill expansion is a continuing construction process and is only completed when the landfill reaches final capacity, ceases accepting waste, and is closed).**



## APPLICATION INFORMATION

### Scope of Application

<b>Emissions Unit ID Number</b>	<b>Description of Emissions Unit</b>	<b>Air Permit Type</b>	<b>Air Permit Processing Fee</b>
001	Municipal Solid Waste Class I Landfill with Gas Extraction	N/A	\$0
002	Phase I – Class I Landfill Gas Collection System Flare #1	N/A	\$0
005	New MSW Class I Landfill (expansion) with Gas Extraction – Cells 11-23	N/A	\$0

### Application Processing Fee

**Check one:** ☐ Attached - Amount: \$\_\_\_\_\_ ☒ Not Applicable



## APPLICATION INFORMATION

### Owner/Authorized Representative Statement

**Complete if applying for an air construction permit or an initial FESOP.**

### NOT APPLICABLE

1. Owner/Authorized Representative Name :
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Owner/Authorized Representative Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
4. Owner/Authorized Representative E-mail Address:
5. Owner/Authorized Representative Statement:  <i>I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.</i>  _____ Signature  _____ Date



## APPLICATION INFORMATION

### Application Responsible Official Certification

**Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the “application responsible official” need not be the “primary responsible official.”**


1.	Application Responsible Official Name: <b>Mike Kaiser</b>
2.	<p>Application Responsible Official Qualification (Check one or more of the following options, as applicable):</p> <p><input checked="" type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.</p> <p><input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively.</p> <p><input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.</p> <p><input type="checkbox"/> The designated representative at an Acid Rain source or CAIR source.</p>
3.	<p>Application Responsible Official Mailing Address...</p> <p>Organization/Firm: <b>Omni Waste of Osceola County, LLC</b></p> <p>Street Address: <b>1501 Omni Way</b></p> <p>City: <b>St. Cloud</b>      State: <b>Florida</b>      Zip Code: <b>34773</b></p>
4.	<p>Application Responsible Official Telephone Numbers...</p> <p>Telephone: <b>(904)673-0446</b>      ext.      Fax: <b>(407)891-3730</b></p>
5.	Application Responsible Official E-mail Address: <b>michael.kaiser@progressivewaste.com</b>



## APPLICATION INFORMATION

### 6. Application Responsible Official Certification:

I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

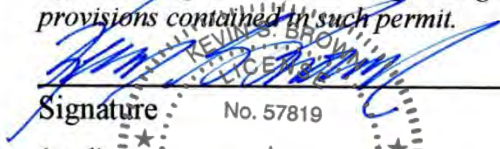
  
Signature

11/13/14  
Date



## APPLICATION INFORMATION

### Professional Engineer Certification

1. Professional Engineer Name: <b>Kevin S. Brown</b> Registration Number: <b>57819</b>
2. Professional Engineer Mailing Address... Organization/Firm: <b>Golder Associates Inc.</b> Street Address: <b>3430 Chamblee Tucker Road</b> City: <b>Atlanta</b> State: <b>Georgia</b> Zip Code: <b>30341</b>
3. Professional Engineer Telephone Numbers... Telephone: <b>(770)496-1893</b> ext. Fax: <b>(770)934-9476</b>
4. Professional Engineer E-mail Address: <b>kbrown@golder.com</b>
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/> , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/> , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input checked="" type="checkbox"/> , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i> <div style="display: flex; justify-content: space-between;"><div> _____ Signature (seal)      No. 57819</div><div><u>11/13/14</u> _____ Date</div></div>

\* Attach any exception to certification statement.



## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates... <b>Section 11 &amp; 12 Township 28S Range 32E</b> Zone East (km) <b>190.4</b> North (km) <b>413.5</b>		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) <b>28/03/32</b> Longitude (DD/MM/SS) <b>81/05/46</b>	
3. Governmental Facility Code: <b>0</b>	4. Facility Status Code: <b>A</b>	5. Facility Major Group SIC Code: <b>49</b>	6. Facility SIC(s): <b>4953</b>
7. Facility Comment : <b>This application serves to renew the expiring Title V Permit #0970079-009AV. Facility consists of MSW Class I landfill with gas extraction system (EU001) and an open candlestick flare (EU002). Omni Waste also requests adding the New MSW Class I landfill (expansion) with Gas Extraction Cells 11-23 (EU005) authorized under air construction permit No. 0970079-011-AC/PSD-FL-429 in the renewed Title V Permit (please note that the landfill expansion is a continuing construction process and is only completed when the landfill reaches final capacity, ceases accepting waste, and is closed).</b>			

#### Facility Contact

1. Facility Contact Name: <b>Mr. Mike Kaiser</b>
2. Facility Contact Mailing Address... Organization/Firm: <b>Omni Waste of Osceola County, LLC</b> Street Address: <b>1501 Omni Way</b> City: <b>St. Cloud</b> State: <b>Florida</b> Zip Code: <b>34773</b>
3. Facility Contact Telephone Numbers: Telephone: <b>(904)673-0446</b> ext. Fax: <b>(407)891-3730</b>
4. Facility Contact E-mail Address: <b>michael.kaiser@progressivewaste.com</b>

#### Facility Primary Responsible Official

**Complete if an "application responsible official" is identified in Section I that is not the facility "primary responsible official."**

1. Facility Primary Responsible Official Name:
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
4. Facility Primary Responsible Official E-mail Address:



## FACILITY INFORMATION

### Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a “major source” and a “synthetic minor source.”

1. <input type="checkbox"/> Small Business Stationary Source	<input type="checkbox"/> Unknown
2. <input type="checkbox"/> Synthetic Non-Title V Source	
3. <input checked="" type="checkbox"/> Title V Source	
4. <input type="checkbox"/> Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. <input type="checkbox"/> Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. <input type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)	
7. <input type="checkbox"/> Synthetic Minor Source of HAPs	
8. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. <input type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. <input type="checkbox"/> Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment: <b>Facility is currently not a major source of HAPs, not a major source of air pollutants other than HAPs. Facility will be a major source of HAPs and a major source of air pollutants other than HAPs with the completion of project authorized under permit No. 0970079-011 AC/PSD-FL-429 issued on 9/15/2014.</b>	



## FACILITY INFORMATION

### List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
CO	A	
SO <sub>2</sub>	A	
HAP (Individual) (H001 to H189)	B	
HAP (total)	B	
NMOC	B	
VOC	B	
PM	B	
NO <sub>x</sub>	B	



## FACILITY INFORMATION

### B. EMISSIONS CAPS

#### Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility- Wide Cap [Y or N]? (all units)	3. Emissions Unit ID's Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap

7. Facility-Wide or Multi-Unit Emissions Cap Comment:



## FACILITY INFORMATION

### C. FACILITY ADDITIONAL INFORMATION

#### **Additional Requirements for All Applications, Except as Otherwise Stated**

1.	Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>Figure 1</b> <input type="checkbox"/> Previously Submitted, Date: _____
2.	Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>Figure 2</b> <input type="checkbox"/> Previously Submitted, Date: _____
3.	Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>Attachment B</b> <input type="checkbox"/> Previously Submitted, Date: _____

#### **Additional Requirements for Air Construction Permit Applications – NOT APPLICABLE**

1.	Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (existing permitted facility)
2.	Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): <input type="checkbox"/> Attached, Document ID: _____
3.	Rule Applicability Analysis: <input type="checkbox"/> Attached, Document ID: _____
4.	List of Exempt Emissions Units: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (no exempt units at facility)
5.	Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
6.	Air Quality Analysis (Rule 62-212.400(7), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
7.	Source Impact Analysis (Rule 62-212.400(5), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
8.	Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
9.	Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
10.	Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable



## FACILITY INFORMATION

### C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

#### **Additional Requirements for FESOP Applications – NOT APPLICABLE**

- |   |
|---|
| 1. List of Exempt Emissions Units:<br><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (no exempt units at facility) |
|---|

#### **Additional Requirements for Title V Air Operation Permit Applications**

- |  |
|--|
| 1. List of Insignificant Activities: (Required for initial/renewal applications only)<br><input checked="" type="checkbox"/> Attached, Document ID: <u><b>Attachment C</b></u> <input type="checkbox"/> Not Applicable (revision application)  |
| 2. Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)<br><input checked="" type="checkbox"/> Attached, Document ID: <u><b>Attachment D</b></u><br><input type="checkbox"/> Not Applicable (revision application with no change in applicable requirements)  |
| 3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)<br><input checked="" type="checkbox"/> Attached, Document ID: <u><b>Attachment E</b></u><br>Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing. |
| 4. List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)<br><input type="checkbox"/> Attached, Document ID: _____<br><input type="checkbox"/> Equipment/Activities Onsite but Not Required to be Individually Listed<br><input checked="" type="checkbox"/> Not Applicable  |
| 5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable   |
| 6. Requested Changes to Current Title V Air Operation Permit:<br><input checked="" type="checkbox"/> Attached, Document ID: <u><b>Attachment F</b></u> <input type="checkbox"/> Not Applicable   |



## FACILITY INFORMATION

### C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

### **Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program**

- ### 1. Acid Rain Program Forms:

Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):

☐ Attached, Document ID:\_\_\_\_\_ ☐ Previously Submitted, Date:\_\_\_\_\_

☒ Not Applicable (not an Acid Rain source)

## Phase II NO<sub>x</sub> Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):

☐ Attached, Document ID:\_\_\_\_\_ ☐ Previously Submitted, Date:\_\_\_\_\_

<b>x</b>	Not Applicable
----------	----------------

**New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):**

☐ Attached, Document ID:\_\_\_\_\_ ☐ Previously Submitted, Date:\_\_\_\_\_

<b>x</b>	Not Applicable
----------	----------------

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):

☐ Attached, Document ID:\_\_\_\_\_ ☐ Previously Submitted, Date:\_\_\_\_\_

<b>x</b>	Not Applicable (not a CAIR source)
----------	------------------------------------

### Additional Requirements Comment

[illegible]



## EMISSIONS UNIT INFORMATION

Section [1] of [1]

### III. EMISSIONS UNIT INFORMATION

**Title V Air Operation Permit Application** - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

**Air Construction Permit or FESOP Application** - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an “unregulated emissions unit” does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

**Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application** – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.



## EMISSIONS UNIT INFORMATION

Section [1] of [2]

### A. GENERAL EMISSIONS UNIT INFORMATION

#### Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

- ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

#### Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- ☒ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
- ☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section: **Class I municipal solid waste (MSW) landfill (Waste Phase 1 through 3 with vertical expansion, Cells 1-10) with gas extraction and one existing flare.**

3. Emissions Unit Identification Number: **001 & 002**

4. Emissions Unit  
Status Code: **A**

5. Commence  
Construction  
Date:

6. Initial Startup  
Date:  
**January 2004  
(December 2008 –  
flare)**

7. Emissions Unit  
Major Group  
SIC Code: **49**

8. Federal Program Applicability: (Check all that apply)

- ☐ Acid Rain Unit
- ☐ CAIR Unit

9. Package Unit:

Manufacturer:

Model Number:

10. Generator Nameplate Rating: **MW**

11. Emissions Unit Comment: **Emission units 001 and 002 have been previously paired; The MSW landfill proper has no true emission stack, only fugitive emissions. 40 CFR 60, Subpart WWW requires the facility to design, install, and operate a landfill gas collection and control system (GCCS). The GCCS collects generated landfill gas and conveys the collected emissions to the installed flare (EU 002).**



## EMISSIONS UNIT INFORMATION

Section [1] of [2]

**Emissions Unit Control Equipment/Method:** Control 1 of 1

1. Control Equipment/Method Description: **Flaring of landfill gas.**

2. Control Device or Method Code: **023**

**Emissions Unit Control Equipment/Method:** Control \_\_\_\_ of \_\_\_\_

1. Control Equipment/Method Description:

2. Control Device or Method Code:

**Emissions Unit Control Equipment/Method:** Control \_\_\_\_ of \_\_\_\_

1. Control Equipment/Method Description:

2. Control Device or Method Code:

**Emissions Unit Control Equipment/Method:** Control \_\_\_\_ of \_\_\_\_

1. Control Equipment/Method Description:

2. Control Device or Method Code:



**EMISSIONS UNIT INFORMATION**

Section [1] of [3]

**B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Process or Throughput Rate: <b>2,631,200 tons/yr</b>
2. Maximum Production Rate: <b>Not applicable</b>
3. Maximum Heat Input Rate: million Btu/hr <b>Not applicable</b>
4. Maximum Incineration Rate: pounds/hr <b>Not applicable</b> tons/day
5. Requested Maximum Operating Schedule: <div style="display: flex; justify-content: space-between;"><div><b>24</b> hours/day</div><div><b>7</b> days/week</div></div> <div style="display: flex; justify-content: space-between;"><div><b>52</b> weeks/year</div><div><b>8,760</b> hours/year</div></div>
6. Operating Capacity/Schedule Comment: <b>Maximum throughput rate represents maximum annual waste acceptance rate of the landfill. Permit No. 0970079-011-AC.PSD-FL-429 authorizes expansion of the landfill and increase the capacity from 16.2 million tons to an estimated 81.5 million tons. Existing flare (EU002) capacity is 3,600 scfm (of landfill gas).</b>



**EMISSIONS UNIT INFORMATION**

Section [1] of [3]

**C. EMISSION POINT (STACK/VENT) INFORMATION****(Optional for unregulated emissions units.)****Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram: <b>001/002</b>		2. Emission Point Type Code: <b>4/1</b>	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: <b>No true emission point for the MSW landfill (EU001). The existing flare has one stack which all emissions exit from.</b>			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: <b>EU 002 (Flare #1)</b>			
5. Discharge Type Code: <b>F/V</b>	6. Stack Height: <b>54</b> Feet	7. Exit Diameter: <b>1.0</b> feet	
8. Exit Temperature: <b>1,350 °F</b>	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: <b>3,600</b> dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: <b>Stack parameters are for the existing open candlestick flare (EU002).</b>			



**EMISSIONS UNIT INFORMATION**

Section [1] of [3]

**D. SEGMENT (PROCESS/FUEL) INFORMATION****Segment Description and Rate:** Segment 1 of 2

1. Segment Description (Process/Fuel Type): <b>Waste disposal, solid waste disposal – commercial/institutional, landfill dump.</b>		
2. Source Classification Code (SCC): <b>5-02-006-02</b>		3. SCC Units: <b>Tons Stored</b>
4. Maximum Hourly Rate:	5. Maximum Annual Rate: <b>2,631,200</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: <b>Waste storage at the facility assumes landfill operation for 5.5 days per week corresponding to 286 equivalent full days per year.</b>		

**Segment Description and Rate:** Segment 2 of 2

1. Segment Description (Process/Fuel Type): <b>Emissions related to MSW landfill gas burned in the flare for the control of landfill gas in accordance with 40 CFR 60, Subpart WWW.</b>		
2. Source Classification Code (SCC): <b>5-02-006-01</b>		3. SCC Units: <b>Million Cubic Feet Burned</b>
4. Maximum Hourly Rate: 0.216	5. Maximum Annual Rate: <b>1892.16</b>	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: <b>500</b>
10. Segment Comment:		



**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)****Segment Description and Rate:** Segment \_\_ of \_\_

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

**Segment Description and Rate:** Segment \_\_ of \_\_

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		



**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**E. EMISSIONS UNIT POLLUTANTS****List of Pollutants Emitted by Emissions Unit**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
<b>Individual HAP (H001 to H189)</b>	<b>023</b>		<b>WP</b>
<b>Total HAP</b>	<b>023</b>		<b>WP</b>
<b>NMOC</b>	<b>023</b>		<b>WP</b>
<b>VOC</b>	<b>023</b>		<b>EL</b>
<b>CO</b>			<b>EL</b>
<b>SO<sub>2</sub></b>			<b>EL</b>
<b>PM</b>			<b>EL</b>
<b>NO<sub>x</sub></b>			<b>EL</b>



**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**POLLUTANT DETAIL INFORMATION**

Page [1] of [10]

**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**  
(Optional for unregulated emissions units.)

**Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: <b>VOC</b>		2. Total Percent Efficiency of Control: <b>7</b>	
3. Potential Emissions: lb/hour <b>17<sup>(a)</sup></b> tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): tons/year			
6. Emission Factor:  Reference: Permit No.		7. Emissions Method Code: <b>0</b>	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: <b>Refer to the June 2008 Title V Permit/Air Construction Permit Modification Application.</b>			
11. Potential, Fugitive, and Actual Emissions Comment: <sup>(a)</sup> <b>Facility-wide VOC emissions limited to 17 tons/yr.</b>			



**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**POLLUTANT DETAIL INFORMATION**

Page [2] of [10]

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS****Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.****Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>17 tons per year</b>	4. Equivalent Allowable Emissions: lb/hour <b>17 tons/year</b>
5. Method of Compliance: <b>Recordkeeping: Maintain Monthly log of consecutive 12 month total emissions.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Permit Nos. 0970079-006-AC and 0970079-009-AV.</b>	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	



**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**  
(Optional for unregulated emissions units.)

**Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: <b>CO</b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour <b>249<sup>(a)</sup></b> tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): <b>N/A</b> to tons/year			
6. Emission Factor: Reference: <b>Permit No. 0970079-006-AC</b>		7. Emissions Method Code: <b>0</b>	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: <b>Refer to the June 2008 Title V Permit/Air Construction Permit Modification Application.</b>			
11. Potential, Fugitive, and Actual Emissions Comment: <sup>(a)</sup> <b>Facility-wide CO Emissions limited to 249 tons/yr.</b>			



**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>ESCPSD</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>249 tons/yr</b>	4. Equivalent Allowable Emissions: lb/hour <b>249 tons/year</b>
5. Method of Compliance: <b>Recordkeeping: Maintain Monthly log of consecutive 12 month total emissions.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Permit Nos. 0970079-006-AC and 0970079-009-AV</b>	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	



**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**POLLUTANT DETAIL INFORMATION**

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**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**  
(Optional for unregulated emissions units.)

**Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: <b>SO<sub>2</sub></b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour <b>249<sup>(a)</sup></b> tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): tons/year			
6. Emission Factor:  Reference: <b>Permit No. 0970079-006-AC</b>			7. Emissions Method Code: <b>0</b>
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: <b>Refer to the June 2008 Title V Permit/Air Construction Permit Modification Application.</b>			
11. Potential, Fugitive, and Actual Emissions Comment: <sup>(a)</sup> <b>Facility-wide SO<sub>2</sub> emissions limited to 249 tons/yr</b>			



**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>ESCPSD</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>249 tons/yr</b>	4. Equivalent Allowable Emissions: lb/hour <b>249 tons/year</b>
5. Method of Compliance: <b>Recordkeeping: Maintain Monthly log of consecutive 12 month total emissions.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Permit Nos. 0970079-006-AC and 0970079-009-AV</b>	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	



**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**  
(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: <b>PM/PM<sub>10</sub></b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour <b>12<sup>(a)</sup></b> tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): <b>N/A</b> to tons/year			
6. Emission Factor:  Reference: <b>Permit No. 0970079-006-AC</b>		7. Emissions Method Code: <b>0</b>	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: <b>Refer to the June 2008 Title V Permit/Air Construction Permit Modification Application.</b>			
11. Potential, Fugitive, and Actual Emissions Comment: <b>(a) Facility-wide PM/PM<sub>10</sub> emissions limited to 12 tons/yr</b>			



**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>12 tons/year</b>	4. Equivalent Allowable Emissions: lb/hour <b>12 tons/year</b>
5. Method of Compliance: <b>Recordkeeping: Maintain Monthly log of consecutive 12 month total emissions.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Permit Nos. 0970079-006-AC and 0970079-009-AV</b>	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	



**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS**  
(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions**

1. Pollutant Emitted: <b>NO<sub>x</sub></b>		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour <b>48<sup>(a)</sup></b> tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): <b>N/A</b> to tons/year			
6. Emission Factor:  Reference: <b>Permit No. 0970079-006-AC</b>		7. Emissions Method Code: <b>0</b>	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From: To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions: <b>Refer to the June 2008 Title V Permit/Air Construction Permit Modification Application.</b>			
11. Potential, Fugitive, and Actual Emissions Comment: <sup>(a)</sup> <b>Facility-wide NOX emissions limited to 48 tons/yr</b>			



**EMISSIONS UNIT INFORMATION**

Section [1] of [2] Page

**POLLUTANT DETAIL INFORMATION**

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**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS**

**Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.**

**Allowable Emissions** Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: <b>Other</b>	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: <b>48 tons/yr</b>	4. Equivalent Allowable Emissions: lb/hour <b>48 tons/year</b>
5. Method of Compliance: <b>Recordkeeping: Maintain Monthly log of consecutive 12 month total emissions.</b>	
6. Allowable Emissions Comment (Description of Operating Method): <b>Permit Nos. 0970079-006-AC and 0970079-009-AV</b>	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_\_ of \_\_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	



**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**G. VISIBLE EMISSIONS INFORMATION**

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

**Visible Emissions Limitation:** Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: <b>VE00</b>	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: <b>0 %</b> Exceptional Conditions: <b>&gt;0 %</b> Maximum Period of Excess Opacity Allowed: <b>5 min. during any 2 consecutive hours</b>	
4. Method of Compliance: <b>US EPA Method 22</b>	
5. Visible Emissions Comment: <b>Per rule 40 CFR 60.18©(1) (NSPS Subpart A): Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.</b>	

**Visible Emissions Limitation:** Visible Emissions Limitation \_\_\_ of \_\_\_\_

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	



**EMISSIONS UNIT INFORMATION**

Section [1] of [2]

**H. CONTINUOUS MONITOR INFORMATION**

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

**Continuous Monitoring System:** Continuous Monitor 1 of 1

1. Parameter Code: <b>Other</b>	2. Pollutant(s): <b>NMOC</b>
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: <b>Under 40 CFR 60, Subpart WWW, open flares used for compliance are to be continuously monitored for the presence of a flame.</b>	

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: <input type="checkbox"/> Rule <input type="checkbox"/> Other	
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	



**EMISSIONS UNIT INFORMATION**

Section [1] of [3]

**H. CONTINUOUS MONITOR INFORMATION (CONTINUED)****Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	



## EMISSIONS UNIT INFORMATION

Section [1] of [2]

### I. EMISSIONS UNIT ADDITIONAL INFORMATION

#### Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>Figure 1</b> <input type="checkbox"/> Previously Submitted, Date _____
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>Attachment G</b> <input type="checkbox"/> Previously Submitted, Date _____
3.	Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>Attachment H</b> <input type="checkbox"/> Previously Submitted, Date _____
4.	Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>Attachment I</b> <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable (construction application)
5.	Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6.	Compliance Demonstration Reports/Records: <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <b>Multiple</b> Test Date(s)/Pollutant(s) Tested: <b><u>The existing flare (Flare #1) visible emissions and sulfur content have been tested and reported annually.</u></b> <input checked="" type="checkbox"/> To be Submitted, Date (if known): <b><u>Semi-annual</u></b> Test Date(s)/Pollutant(s) Tested: <b><u>Semi-annual NSPS reports.</u></b> <input type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7.	Other Information Required by Rule or Statute: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable



## Section [1] of [2]

**Additional Requirements for Air Construction Permit Applications – NOT APPLICABLE**

- |  |   |   |
|--|---|---|
| 1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): | <input type="checkbox"/> Attached, Document ID: _____ | <input type="checkbox"/> Not Applicable |
| 2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):            | <input type="checkbox"/> Attached, Document ID: _____ | <input type="checkbox"/> Not Applicable |
| 3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)              | <input type="checkbox"/> Attached, Document ID: _____ | <input type="checkbox"/> Not Applicable |

1. Identification of Applicable Requirements:  
☒ Attached, Document ID: **Attachment D**

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2. Compliance Assurance Monitoring:  
☐ Attached, Document ID: \_\_\_\_\_ ☒ Not Applicable

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3. Alternative Methods of Operation:  
☐ Attached, Document ID: \_\_\_\_\_ ☒ Not Applicable

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4. Alternative Modes of Operation (Emissions Trading):  
☐ Attached, Document ID: \_\_\_\_\_ ☒ Not Applicable

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**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**A. GENERAL EMISSIONS UNIT INFORMATION****Title V Air Operation Permit Emissions Unit Classification**

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

- ☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
- ☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

**Emissions Unit Description and Status**

1. Type of Emissions Unit Addressed in this Section: (Check one)

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

☒ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section: New MSW Class I Landfill (expansion) with Gas Extraction – Cells 11-23

3. Emissions Unit Identification Number: **005**

4. Emissions Unit Status Code: <b>C</b>	5. Commence Construction Date: <b>Q2/2015</b>	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code: <b>49</b>
---	---	--------------------------	---

8. Federal Program Applicability: (Check all that apply)

- ☐ Acid Rain Unit
- ☐ CAIR Unit

9. Package Unit:

Manufacturer:

Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment: **EU005 was recently authorized by Air Permit No. 0970079-011-AC/PSD-FL-429. Note that landfill expansion is a continuous construction process and is complete only when the landfill reaches permitted capacity, ceases accepting waste, and is closed. Control of the landfill gas generated within these cells will be in accordance with 40 CFR 60, Subpart WWW and facility permits.**



## EMISSIONS UNIT INFORMATION

Section [2] of [2]

**Emissions Unit Control Equipment/Method:** Control 1 of 1

1. Control Equipment/Method Description: **Flares will be added as required by Permit No. 0970079-011-AV/PSD-FL-429.**

2. Control Device or Method Code: **023**

**Emissions Unit Control Equipment/Method:** Control \_\_\_\_ of \_\_\_\_

1. Control Equipment/Method Description:

2. Control Device or Method Code:

**Emissions Unit Control Equipment/Method:** Control \_\_\_\_ of \_\_\_\_

1. Control Equipment/Method Description:

2. Control Device or Method Code:

**Emissions Unit Control Equipment/Method:** Control \_\_\_\_ of \_\_\_\_

1. Control Equipment/Method Description:

2. Control Device or Method Code:



**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**B. EMISSIONS UNIT CAPACITY INFORMATION**

(Optional for unregulated emissions units.)

**Emissions Unit Operating Capacity and Schedule**

1. Maximum Process or Throughput Rate: <b>Not applicable</b>
2. Maximum Production Rate: <b>Not applicable</b>
3. Maximum Heat Input Rate: million Btu/hr <b>Not applicable</b>
4. Maximum Incineration Rate: pounds/hr <b>Not applicable</b> tons/day
5. Requested Maximum Operating Schedule: <div style="display: flex; justify-content: space-between;"><div><b>24</b> hours/day</div><div><b>7</b> days/week</div></div> <div style="display: flex; justify-content: space-between;"><div><b>52</b> weeks/year</div><div><b>8,760</b> hours/year</div></div>
6. Operating Capacity/Schedule Comment: <b>Permit No. 0970079-011-AC/PSD-FL-429 authorizes expansion of the landfill and increases total waste capacity from 16.2 million tons to an estimated 81.5 million tons.</b>



**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**C. EMISSION POINT (STACK/VENT) INFORMATION****(Optional for unregulated emissions units.)****Emission Point Description and Type**

1. Identification of Point on Plot Plan or Flow Diagram:		2. Emission Point Type Code:1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code:	6. Stack Height: feet	7. Exit Diameter: feet	
8. Exit Temperature:	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):		14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:			



**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**D. SEGMENT (PROCESS/FUEL) INFORMATION****Segment Description and Rate:** Segment 1 of 1

1. Segment Description (Process/Fuel Type): <b>Waste disposal, solid waste disposal – commercial/institutional, landfill dump</b>		
2. Source Classification Code (SCC): <b>5-02-006-02</b>		3. SCC Units: <b>Tons stored</b>
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: <b>Waste storage at the facility assumes landfill operation for 5.5 days per week corresponding to 286 equivalent full days per year. The total waste capacity of the landfill is an estimated 81.5 Million tons.</b>		

**Segment Description and Rate:** Segment \_\_ of \_\_

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		



**EMISSIONS UNIT INFORMATION**

Section [ ] of [ ]

**D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)****Segment Description and Rate:** Segment \_\_ of \_\_

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

**Segment Description and Rate:** Segment \_\_ of \_\_

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		



**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**E. EMISSIONS UNIT POLLUTANTS****List of Pollutants Emitted by Emissions Unit**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
<b>Individual HAP (H001 to H189)</b>	<b>023</b>		<b>WP</b>
<b>Total HAP</b>	<b>023</b>		<b>WP</b>
<b>NMOC</b>	<b>023</b>		<b>WP</b>
<b>VOC</b>	<b>023</b>		<b>WP</b>



**F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION –  
POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS  
(Optional for unregulated emissions units.)**

**Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.**

**Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions N/A**

1. Pollutant Emitted:		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour                                  tons/year		4. Synthetically Limited? <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year			
6. Emission Factor:  Reference:		7. Emissions Method Code:	
8.a. Baseline Actual Emissions (if required): tons/year		8.b. Baseline 24-month Period: From:                                  To:	
9.a. Projected Actual Emissions (if required): tons/year		9.b. Projected Monitoring Period: <input type="checkbox"/> 5 years <input type="checkbox"/> 10 years	
10. Calculation of Emissions:			
11. Potential, Fugitive, and Actual Emissions Comment:			



**EMISSIONS UNIT INFORMATION**

Section [2] of [2] Page

**POLLUTANT DETAIL INFORMATION**

[2] of [2]

**F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION -  
ALLOWABLE EMISSIONS****Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation. NOT APPLICABLE****Allowable Emissions** Allowable Emissions \_\_ of \_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_ of \_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

**Allowable Emissions** Allowable Emissions \_\_ of \_\_

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour                      tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	



**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**G. VISIBLE EMISSIONS INFORMATION****Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation. NOT APPLICABLE****Visible Emissions Limitation:** Visible Emissions Limitation \_\_ of \_\_\_\_

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions:                      %      Exceptional Conditions:                      % Maximum Period of Excess Opacity Allowed:                      min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

**Visible Emissions Limitation:** Visible Emissions Limitation \_\_ of \_\_\_\_

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Allowable Opacity: Normal Conditions:                      %      Exceptional Conditions:                      % Maximum Period of Excess Opacity Allowed:                      min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	



**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**H. CONTINUOUS MONITOR INFORMATION****Complete Subsection H if this emissions unit is or would be subject to continuous monitoring. NOT APPLICABLE****Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	



**EMISSIONS UNIT INFORMATION**

Section [2] of [2]

**H. CONTINUOUS MONITOR INFORMATION (CONTINUED)****Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

**Continuous Monitoring System:** Continuous Monitor \_\_\_\_ of \_\_\_\_

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	



## EMISSIONS UNIT INFORMATION

Section [2] of [2]

### I. EMISSIONS UNIT ADDITIONAL INFORMATION

#### Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>Figure 1</b> <input type="checkbox"/> Previously Submitted, Date _____
2.	Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>Attachment G</b> <input type="checkbox"/> Previously Submitted, Date _____
3.	Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>Attachment H</b> <input type="checkbox"/> Previously Submitted, Date _____
4.	Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input checked="" type="checkbox"/> Attached, Document ID: <b>Attachment I</b> <input type="checkbox"/> Previously Submitted, Date _____ <input type="checkbox"/> Not Applicable (construction application)
5.	Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously Submitted, Date _____ <input checked="" type="checkbox"/> Not Applicable
6.	Compliance Demonstration Reports/Records: <input type="checkbox"/> Attached, Document ID: _____ Test Date(s)/Pollutant(s) Tested: _____ <input type="checkbox"/> Previously Submitted, Date: _____ Test Date(s)/Pollutant(s) Tested: _____ <input checked="" type="checkbox"/> To be Submitted, Date (if known): <b>Semi-annual</b> Test Date(s)/Pollutant(s) Tested: <b>Annual and semi-annual reports/testing</b> <input type="checkbox"/> Not Applicable Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7.	Other Information Required by Rule or Statute: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable



## Section [2] of [2]

**Additional Requirements for Air Construction Permit Applications NOT APPLICABLE**

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):  
☐ Attached, Document ID: \_\_\_\_\_ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):  
☐ Attached, Document ID: \_\_\_\_\_ ☐ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)  
☐ Attached, Document ID: \_\_\_\_\_ ☐ Not Applicable

1.	Identification of Applicable Requirements:	
	<input checked="" type="checkbox"/> Attached, Document ID: <b><u>Attachment D</u></b>	
2.	Compliance Assurance Monitoring:	
	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
3.	Alternative Methods of Operation:	
	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable
4.	Alternative Modes of Operation (Emissions Trading):	
	<input type="checkbox"/> Attached, Document ID: _____	<input checked="" type="checkbox"/> Not Applicable

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**ATTACHMENT B**

**PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED  
PARTICULATE MATTER**



## J.E.D. SOLID WASTE MANAGEMENT FACILITY

### ATTACHMENT B

#### PRECAUTIONS TO PREVENT UNCONFINED PARTICULATE MATTER

The J.E.D. Solid Waste Management Facility has negligible amounts of unconfined particulate matter as a result of the operation of the facility. Potential examples of types of unconfined particulate matter that may be found at the site include:

- Fugitive dust from paved and unpaved roads; and
- Earthmoving activities as a result of placing landfill cover material and other construction activities.

There are several precautions to prevent unconfined particulate matter already in the original design of the facility. These include:

- Paving of roads, parking areas and equipment yards; and
- Landscaping and planting of vegetation.

Operational measures are undertaken at the facility that also minimize unconfined particulate matter emissions, in accordance with FAC Rule 62-296.320(4):

- Maintenance of paved areas as needed;
- Regular mowing of grass and care of vegetation;
- Covering, at all times when in motion, open bodied trucks that are transporting materials for disposal in the landfill;
- The prompt removal of earth or other material from paved streets onto which earth or other material has been deposited;
- Water truck used to apply water on unpaved areas and during construction activities; and
- Limiting access to plant property by unnecessary vehicles.



**ATTACHMENT C**  
**LIST OF INSIGNIFICANT ACTIVITIES**



**ATTACHMENT C**

**INSIGNIFICANT ACTIVITIES**

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), 62-210.300(3)(a) and (b)1., F.A.C.

1. Vehicle and heavy equipment or machinery operated on site that contribute to a non-significant amount of fugitive particulate matter, include 3 compactors, 6 dozers, 1 wheel loader, 2 excavators, 1 backhoe, 3 off road dump trucks, 1 road grader, 2 utility vehicles, 2 service type trucks, 1 fuel truck, 1 roll-off truck, 2 water trucks, and 3 tippers;
2. Uncontrolled particulate emissions generated by wind;
3. Liquid storage tanks/vessels, including:
  - a. (1) 10,000 gallon diesel tank
  - b. (1) 500 gallon waste oil tank
  - c. (1) 500 gallon unleaded fuel tank
  - d. (1) 500 gallon diesel tank
  - e. (1) 275 gallon anti-freeze tank
  - f. (1) 450 gallon hydraulic oil tank
  - g. (3) 275 gallon lubricating oil tanks
  - h. (1) 2,500 gallon service fuel truck
  - i. (1) 450 gallon motor oil tank
  - j. (2) 250 gallon transmission fluid tank
  - k. Misc. drums of lubricants
4. Leachate storage ponds;
5. Portable gas powered emergency generator;
6. Fire and safety equipment to include fire extinguishers;
7. Surface coating operations - total quantity of coatings containing greater than 5.0 percent VOCs, by volume, used is 6.0 gallons per day or less, averaged monthly;
8. Equipment used for surface coating;
9. Lubrication operations of landfill equipment on a weekly basis;
10. Plant maintenance and upkeep activities (e.g., grounds keeping, general repairs, cleaning, welding).
11. Application of herbicide;
12. Vehicle refueling operations;
13. Internal combustion engines used for landscaping purposes;



## J.E.D. SOLID WASTE MANAGEMENT FACILITY

14. Air compressors and pneumatically operated hand tools;
15. Use of environmentally safe degreasers for parts cleaning;
16. Air-conditioning units used for human comfort that do not exhaust air pollutants into the ambient air from any industrial process;
17. Consumer use of office equipment and products;
18. Janitorial services and consumer use of janitorial products;
19. Bathroom/toilet vent emissions; and,
20. Fugitive dust from travel and activity on unpaved surfaces.



**ATTACHMENT D**  
**IDENTIFICATION OF APPLICABLE REQUIREMENTS**



J.E.D. SOLID WASTE MANAGEMENT FACILITY

**ATTACHMENT D**

**IDENTIFIED APPLICABLE REQUIREMENTS**

***Federal:*** ***(description)***

40 CFR 60, Subpart A: General Provisions

40 CFR 60, Subpart WWW: Standards of Performance for Municipal Solid Waste Landfills

40 CFR 63 Subpart AAAA: National Emission Standards for Hazardous Air Pollutants for Municipal Solid Waste Landfills

**TITLE V CORE LIST (Effective: 03/01/02):**

[**Note:** The Title V Core List is meant to simplify the completion of the "List of Applicable Regulations" for DEP Form No. 62-210.900(1), Application for Air Permit - Long Form. The Title V Core List is a list of rules to which all Title V Sources are presumptively subject. The Title V Core List may be referenced in its entirety, or **with specific exceptions**. The Department may periodically update the Title V Core List.]

***Federal:*** ***(description)***

40 CFR 61, Subpart M: NESHAP for Asbestos.

40 CFR 82: Protection of Stratospheric Ozone.

40 CFR 82, Subpart B: Servicing of Motor Vehicle Air Conditioners (MVAC).

40 CFR 82, Subpart F: Recycling and Emissions Reduction.

***State:*** ***(description)***

**CHAPTER 62-4, F.A.C.: PERMITS**, effective 05/01/03

62-4.030, F.A.C.: General Prohibition.

62-4.040, F.A.C.: Exemptions.

62-4.050, F.A.C.: Procedure to Obtain Permits and Other Authorizations; Applications.

62-4.060, F.A.C.: Consultation.

62-4.070, F.A.C.: Standards for Issuing or Denying Permits; Issuance; Denial.

62-4.080, F.A.C.: Modification of Permit Conditions.

62-4.090, F.A.C.: Renewals.

62-4.100, F.A.C.: Suspension and Revocation.

62-4.110, F.A.C.: Financial Responsibility.

62-4.120, F.A.C.: Transfer of Permits.

62-4.130, F.A.C.: Plant Operation - Problems.

62-4.150, F.A.C.: Review.

62-4.160, F.A.C.: Permit Conditions.

62-4.210, F.A.C.: Construction Permits.

62-4.220, F.A.C.: Operation Permit for New Sources.



## J.E.D. SOLID WASTE MANAGEMENT FACILITY

### **CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS,** effective 02/02/06

- 62-210.300, F.A.C.: Permits Required.
- 62-210.300(1), F.A.C.: Air Construction Permits.
- 62-210.300(2), F.A.C.: Air Operation Permits.
- 62-210.300(3), F.A.C.: Exemptions.
- 62-210.300(4), F.A.C.: Air General Permits.
- 62-210.300(5), F.A.C.: Notification of Startup.
- 62-210.300(6), F.A.C.: Emissions Unit Reclassification.
- 62-210.300(7), F.A.C.: Transfer of Air Permits.
- 62-210.350, F.A.C.: Public Notice and Comment.
- 62-210.350(1), F.A.C.: Public Notice of Proposed Agency Action.
- 62-210.350(2), F.A.C.: Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.
- 62-210.350(3), F.A.C.: Additional Public Notice Requirements for Facilities Subject to Operation Permits for Title V Sources.
- 62-210.360, F.A.C.: Administrative Permit Corrections.
- 62-210.370, F.A.C.: Emissions Computing and Reporting.
- 62-210.370(2), F.A.C.: Computation of Emissions
- 62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility.
- 62-210.650, F.A.C.: Circumvention.
- 62-210.700, F.A.C.: Excess Emissions.
- 62-210.900, F.A.C.: Forms and Instructions.
- 62-210.900(1), F.A.C.: Application for Air Permit – Long Form, Form and Instructions.
- 62-210.900(2), F.A.C.: Application for Title V Air Permit Renewal.
- 62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions.
- 62-210.900(7), F.A.C.: Application for Transfer of Air Permit – Title V and Non-Title V Source.

### **CHAPTER 62-212, F.A.C.: STATIONARY SOURCES - PRECONSTRUCTION REVIEW,** effective 02/02/06 **SEE DISCUSSION FOLLOWING LIST OF REGULATIONS**

### **CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION,** effective 04/14/03

- 62-213.202, F.A.C.: Responsible Official.
- 62-213.205, F.A.C.: Annual Emissions Fee.
- 62-213.300, F.A.C.: Title V Air General Permits.
- 62-213.400, F.A.C.: Permits and Permit Revisions Required.
- 62-213.410, F.A.C.: Changes Without Permit Revision.
- 62-213.412, F.A.C.: Immediate Implementation Pending Revision Process.
- 62-213.415, F.A.C.: Trading of Emissions Within a Source.
- 62-213.420, F.A.C.: Permit Applications.
- 62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.
- 62-213.440, F.A.C.: Permit Content.
- 62-213.450, F.A.C.: Permit Review by EPA and Affected States
- 62-213.460, F.A.C.: Permit Shield.
- 62-213.900, F.A.C.: Forms and Instructions.
- 62-213.900(1), F.A.C.: Major Air Pollution Source Annual Emissions Fee Form.



## J.E.D. SOLID WASTE MANAGEMENT FACILITY

62-213.900(7), F.A.C.: Statement of Compliance Form.

62-213.900(8), F.A.C.: Responsible Official Notification Form.

### **CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS,** effective 02/12/06

62-296.320(2), F.A.C.: Objectionable Odor Prohibited.

62-296.320(4)(c), F.A.C.: Unconfined Emissions of Particulate Matter.

### **CHAPTER 62-297, F.A.C.: STATIONARY SOURCES - EMISSIONS MONITORING,** effective 2/12/04

62-297.310, F.A.C.: General Compliance Test Requirements.

62-297.320, F.A.C.: Standards for Persons Engaged in Visible Emissions Observations.

62-297.401, F.A.C.: Compliance Test Methods.

62-297.440, F.A.C.: Supplementary Test Procedures.

62-297.520, F.A.C.: EPA Continuous Monitor Performance Specifications.

62-297.620, F.A.C.: Exceptions and Approval of Alternate Procedures and Requirements.

### **Miscellaneous:**

28-106, F.A.C.: Decisions Determining Substantial Interests

62-110, F.A.C.: Exception to the Uniform Rules of Procedure, effective 07-01-98

62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 11-30-94

62-257, F.A.C.: Asbestos Notification and Fee, effective 02-09-99

62-281, F.A.C.: Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling,  
effective 09-10-96





# 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

## ELECTRONIC MAIL

mkaiser@wsii.us

## NOTICE OF FINAL PERMIT

In the Matter of an  
Application for Permit by:

Michael Kaiser, Vice President  
Omni Waste of Osceola County, LLC  
1501 Omni Way  
St. Cloud, FL 34773

Re: **FINAL** Title V Permit No.: 0970079-009-AV  
J.E.D. Solid Waste Management Facility

Dear Mr. Kaiser:

Enclosed is **FINAL** Permit Number 0970079-009-AV for the operation of the J.E.D. Solid Waste Management Facility located approximately 6.5 miles south of Holopaw on U.S. Highway 441, Osceola County, Florida issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the permitting authority in the Legal Office; and with the clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the permitting authority.

Executed in Orlando, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

Caroline D. Shine  
Program Administrator  
Air Resource Management

7/13/10

Date



**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL Permit) and all copies were sent by certified mail or electronically (with Received Receipt) before the close of business on July 13, 2010 to the person(s) listed:

Michael Kaiser, Vice President, Omni Waste of Osceola County, LLC (**mkaiser@wsii.us**)

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this NOTICE OF FINAL PERMIT (including the FINAL Permit) were sent by certified mail or electronically (with Received Receipt) on the same date to the person(s) listed:

Brian A. Storey, P. E., Project Engineer, Golder Associates (**bstorey@golder.com**)  
Barbara Friday, BAR [**Barbara.Friday@dep.state.fl.us**] (for posting with Region 4, U.S. EPA)

Clerk Stamp

**FILED**, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.

  
(Clerk)

7/13/10  
(Date)



## **FINAL Determination**

Title V Air Operation Permit  
**FINAL** Permit No.: 0970079-009-AV  
Omni Waste of Osceola Florida, LLC  
J.E.D. Solid Waste Management Facility  
Page 1 of 1

### **I. Comment(s).**

No comments were received from the USEPA during their 45 day review period of the DRAFT/PROPOSED Permit.

### **II. Conclusion.**

In conclusion, the permitting authority hereby issues the FINAL Permit.







Omni Waste of Osceola County, LLC  
J.E.D. Solid Waste Management Facility  
Facility ID No.: 0970079  
Osceola County

**Title V Air Operating Permit Revision**

**FINAL** Permit No.: 0970079-009-AV  
Revision to Title V Air Operation Permit No.: 0970079-007-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



Title V Air Operation Permit Revision

**FINAL Permit No.: 0970079-009-AV**

**Revision to Title V Air Operation Permit No.: 0970079-007-AV**

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# 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:**

Omni Waste of Osceola County, LLC  
1501 Omni Way  
St. Cloud, FL 34773  
Attention: Michael Kaiser, Vice President

**FINAL Permit No.:** 0970079-009-AV

**Facility ID No.:** 0970079

**SIC Nos.:** 49, 4953

**Project:** Title V Air Operation Permit Revision

This permit revision is being issued for the purpose of incorporating the terms and conditions of the air construction permit, No. 0970079-008-AC, for an auto shredder residue (ASR) recycling system and a related reciprocating internal combustion engine/generator. The J.E.D. Solid Waste Management Facility is located west of Highway 441, approximately 6.5 miles south of Holopaw, Osceola County; Latitude: 28° 03' 32" North and Longitude: 81° 05' 46" 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 60, Subpart A for 40 CFR 60, Subpart WWW and 40 CFR 63, Subpart A for 40 CFR 63, Subpart AAAA)

Appendix B, Combined Standard Conditions (40 CFR Part 60, Subpart WWW and 40 CFR 63, Subpart WWW)

Appendix D, Definitions for Subpart WWW – Municipal Solid Waste Landfills

Appendix E, 40 CFR 60 and 61 Subpart A, Flares, General Provisions

Appendix F–Alternate Standards for Low Gas Production Extraction Wells and Leachate Cleanout Riser Connections

Appendix G–Alternate Operating Parameter Value for Specified Gas Extraction Wells

Appendix I-1, List of Insignificant Emission Units and/or Activities,

Appendix J-1, Compliance Plan; Appendix TV-6, Title V Conditions version dated 06/23/06

Tables 2-1, 2-2, and 2-3, Summaries of Requirements for Municipal Solid Waste Landfills

**Effective Date:**

**July 2, 2010**

**Renewal Application Due Date:** November 18, 2014

**Expiration Date:**

**June 30, 2015**

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

Caroline D. Shine  
Program Administrator  
Air Resource Management

JR/jt

"More Protection, Less Process"  
[www.dep.state.fl.us](http://www.dep.state.fl.us)



## **Section I. Facility Information.**

### **Subsection A. Facility Description.**

This permit is for the operation of the J.E.D. Solid Waste Management Facility, a Class 1 Landfill, which includes ten (10) cells for Phases 1 through 3, a gas collection and extraction system, one flare, and ancillary equipment supporting the landfill operation. Future phases not covered by this permit may include an additional seventeen (17) landfill cells (21 total), a larger gas collection and extraction system, additional flares up to a total of four (4) flares, and ancillary equipment on approximately 264 acres. At ultimate build-out, the site will contain approximately 53.2 million yards of waste and initial cover material and will reach a height of approximately 330 feet (NGVD).

Also included in this permit are miscellaneous insignificant emission units and/or activities.

Based on the Title V Air Operation Permit Renewal Application received November 13, 2009, 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 Class I Landfill with Gas Extraction
- 002 Phase I – Class I Landfill Gas Collection System Flare #1
- 004 ASR Recycling System and a related reciprocating internal combustion engine/generator

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:

Construction Permit 0970079-001-AC issued on April 11, 2003

Initial Title V Air Operation Permit Application received July 28, 2004

Construction Permit Modification 0970079-002-AC issued on September 23, 2004

Additional Information Request dated September 24, 2004

Construction Permit/Title V Air Operation Permit Revision Application received June 19, 2008

Title V Air Operation Permit Renewal Application received November 13, 2009

Construction Permit/Title V Air Operation Permit Revision Application received Dec. 17, 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: 850/412-0455

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. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office. 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 1<sup>st</sup> 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, 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 Class I Landfill with Gas Extraction
- 002 Phase I – Class I Landfill Gas Collection System Flare #1

{Permitting Note: This emission unit is regulated under 40 CFR Part 60, Subpart WWW, NSPS for Municipal Solid Waste Landfills and 40 CFR Part 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 total solid waste disposal rate for the facility shall not exceed 2,631,200 tons per year. The solid waste disposed during Phase I through Phase III shall not exceed 16.2 million tons.

[Applicant Request, Rule 62-210.200(PTE), F.A.C., and Construction Permit 0970079-006-AC]

**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., Construction Permit 0970079-001-AC, and Permit Modification 0970079-002-AC]

##### **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), F.A.C., Construction Permit 0970079-001-AC, and Permit Modification 0970079-002-AC]

**A4. Criteria Pollutants.** Emissions from the facility shall not exceed the following:

- SO<sub>2</sub>: 249 tons per any consecutive 12-month period, updated monthly;
- PM/PM<sub>10</sub>: 12 tons per any consecutive 12-month period, updated monthly;
- VOC: 17 tons per any consecutive 12-month period, updated monthly;
- NO<sub>x</sub>: 48 tons per any consecutive 12-month period, updated monthly; and
- CO: 249 tons per any consecutive 12-month period, updated monthly, until a permit is applied for and obtained pursuant to Rule 62-212.400(2), F.A.C., Prevention of Significant Deterioration of Air Quality

[Applicant Request, Rule 62-210,200, (PTE) F.A.C., and Construction Permit 0970079-006-AC]

**A5. PSD Applicability.** This facility will be subject to the Rules for the Prevention of Significant Deterioration (PSD) and a determination of Best Available Control Technology (BACT) in accordance with Rules 62-212.400 and 62-212.410.

[Rules 62-212.400 and 62-212.410, F.A.C.]



**A6. Project Phasing.** When applicable, BACT shall be determined based on technology available when the facility becomes subject to PSD and BACT. Subsequent phasing of the project may require the permittee to demonstrate the adequacy of any previous BACT determination.

[40 CFR 51.166 (j)(4), Permit 0970079-001-AC and Permit Modification 0970079-002-AC]

**A7. Relaxations of Restrictions on Pollutant Emitting Capacity.** If a previously permitted facility or modification becomes a facility or modification which would be subject to the preconstruction review requirements of this rule if it were a proposed new facility or modification solely by virtue of a relaxation in any federally enforceable limitation on the capacity of a facility or modification to emit a pollutant (such as restrictions on hours of operations), which limitation was established after August 7, 1980, then at the time of such relaxation the preconstruction review requirements of this rule shall apply to the facility or modification as though construction had not yet commence on it.

[Rule 62.212.400(2)(g), F.A.C., Permit 0970079-001-AC, and Permit Modification 0970079-002AC]

**A8. Operating parameters.** The permittee shall submit to the Department Bureau of Air Regulation in Tallahassee and to the Department's Central District office, the design information about the selected flares as soon as it is available but no later than 60 days prior to installation of the flares. This information shall include but not be limited to:

- a) Type of flare, model number
- b) Volumetric Flow
- c) Instruments which are used to measure and monitor gas flow and the flare flame temperature

[Permit 0970079-001-AC, Permit Modification 0970079-002-AC, and Construction Permit 0970079-006-AC]

### **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 supersede any of the terms or conditions of this permit.}

**A9. Visible Emissions.** Compliance with the visible emissions standard shall be determined using EPA Method 22 and shall be for the duration of 2 hours. Such tests shall be conducted within 60 days of completion of construction and initial startup operation, and annually thereafter. The required visible emissions test report shall also contain flare gas flow rate and temperature data.

[40 CFR 60.18(f)(1), Permit 0970079-001-AC, and Permit Modification 0970079-002-AC]

**A10.** 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.

[40 CFR 60.18(c)(2), Permit 0970079-001-AC, and Permit Modification 0970079-002-AC]

**A11.** Proper devices for continuous monitoring and recording of the gas flow rate; and flame temperature at each flare, shall be installed prior to the collection and disposal of the active landfill gases. Such devices shall be properly calibrated and maintained at all times, according to the manufacturers' written instructions. A copy of the manufacturer's calibration manual; information relating to the frequency of equipment calibration; and logs relating to calibration of



equipment, gas flow rate to flare, and flame temperature at each flare shall be on site, and made available to compliance inspectors upon request.

[Rule 62-4.070(3) F.A.C., 40 CFR 60, Subpart WWW, Permit 0970079-001-AC, and Permit Modification 0970079-002-AC]

**A12.** 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., Permit 0970079-001-AC and Permit Modification 0970079-002-AC]

**A13.** 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., Permit 0970079-001-AC and Permit Modification 0970079-002-AC]

### **Recordkeeping and Document Submittal**

**A14. Continuous Monitoring.** Proper devices for continuous monitoring and recording of gas flow rate and temperature at each flare, as required by 40 CFR Part 60, §60.18(6)(d) and §60.758(b)(14), shall be installed prior to the collection and disposal of landfill gases. Such devices shall be properly calibrated and maintained at all times according to manufacturers written instructions.

**A15.** To demonstrate compliance with Specific Condition Numbers **A1.** and **A4.**, the permittee shall maintain a monthly log at the facility for a period of at least five years from the date that the data are recorded.

#### **Monthly:**

- a) Designation of month and year of operation for which records are being tabulated;
- b) Consecutive 12-month totals of SO<sub>2</sub>, PM, VOC, NO<sub>x</sub>, and CO emissions;
- c) Consecutive 12-month solid waste disposal rate.

[Rule 62-4.070(3), F.A.C.]

Monthly logs shall be completed by the end of the following month. The logs and supporting documents shall be maintained at the facility for at least 5 years and made available to the Department upon request. Logs must document the method, calculations, and formulas used in determining each emission rate. The latest version of AP42 and the flare manufacturer's emission factors shall be used to calculate emissions. [Rule 62-4.070(3), F.A.C.]

Note: A consecutive 12 month total is equal to the total for the month in question plus the totals for the eleven months previous to the month in question. A consecutive 12-month total treats each month of the year as the end of a 12-month period. A 12-month total is not a year-to-date total. Facilities that have not been operating for 12 months should retain 12 month totals using whatever number of months of data are available until such a time as a consecutive 12 month total can be maintained each month. [Rule 62-4.070(3), F.A.C.]



**A16.** This facility is subject to the applicable requirements of 40 CFR Part 60, Subpart A, General Provisions, 40 CFR Part 60, Subpart WWW, NSPS for Municipal Solid Waste Landfills, and 40 CFR Part 63, Subpart AAAAA, NESHAP for Municipal Solid Waste Landfills (see attached Appendix A and Appendix B). Permit 0970079-001-AC and Permit Modification 0970079-002-AC]



### **Section III. Emissions Unit(s) and Conditions.**

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

<b><u>E.U. ID No.</u></b>	<b><u>Brief Description</u></b>
---------------------------	---------------------------------

- 004	ASR Recycling System and reciprocating internal combustion engine/generator
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The ASR Recycling System includes material transfer equipment, material sizing equipment, magnetic and density separation equipment, and mobile equipment. The process includes the use of water spray to control particulate emissions. The system includes a compression ignition reciprocating internal combustion engine/generator set. The engine is a Caterpillar, Model 3306B, 250 hp.

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

##### **Essential Potential to Emit (PTE) Parameters**

**B0. Compliance Plan – EU 004 - ASR Recycling System:** Pursuant to construction permit 0970079-008-AC, complete and submit for review the Testing and Monitoring Requirements as listed in Appendix J – Compliance Plan. The required test reports shall be submitted to the compliance section of this office (Compliance Authority) as soon as practical but no later than 45 days after the last visible emission test is complete. [Rule 62-297.310(8)(b), F.A.C.]

**B1. Permitted Capacity:** The process rates shall not exceed 438,000 tons of shredder residue in any consecutive 12-month period. [Rules 62-210.200, F.A.C. - Definitions - (PTE), 62-4.070(3), F.A.C., and Permit No(s). 0970079-008-AC]

**B2. Permitted Fuel Consumption:** Total fuel oil consumption for the system shall not exceed 58,640 gallons in any consecutive 12-month period of new no. 2 fuel oil.  
[Rules 62-210.200, F.A.C. - Definitions - (PTE), 62-4.070(3), F.A.C., and Permit No(s). 0970079-008-AC]

**B3. Authorized Fuel:** The facility is permitted to use new (virgin) No. 2 fuel oil. The maximum sulfur content of the fuel oil used shall not exceed 15 ppm (Ultra Low Sulfur Diesel Fuel).  
[Rules 62-210.200, F.A.C. - Definitions - (PTE), 62-4.070(3), F.A.C., and Permit No(s). 0970079-008-AC]

**B4. Restricted Operation:** The hours of operation of are not limited (8760 hours per year).  
[Rules 62-210.200, F.A.C. - Definitions - (PTE), 62-4.070(3), F.A.C., and Permit No(s). 0970079-008-AC]

##### **Emission Limitations and Standards**

**B5. Emissions Limits:** Visible emissions are limited to less than 20 percent opacity.  
[Rule 62-296.320(4)(b)1, F.A.C.]



**Test Methods and Procedures**

**B6. Compliance Tests:** Each particulate matter emission point shall be tested to demonstrate initial compliance with the applicable visible emissions standard listed in Specific Condition No. B5 of this permit section. Visible emissions tests shall be conducted for the Drop from the Infeed Hopper to Trammel Conveyor, Drop from Trammel Conveyor to Trammel Unit, and for the Diesel Engine. **The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the emission unit.** The duration of each test shall be 30 minutes. The emission unit shall be tested prior to the expiration date of the Title V operation permit thereafter. [Rules 62-4.070(3) and 62-297.310(7)(a)1. and 4., F.A.C.]

**B7. Test Requirements:** The permittee shall notify the Compliance Authority at least 15 days prior to any required tests. The permittee shall indicate the date, time, and place of such tests, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9., F.A.C.]

**B8. Test Methods:** Required tests shall be performed in accordance with the following reference methods.

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

No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 and 62-297.100, F.A.C.]

**B9.** The maximum operating rate for the emission unit is 50 tons per hour of shredder residue and firing 17.9 gallons per hour of fuel oil. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity. 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**

**B10.** The fuel sulfur content for liquid fuels shall be evaluated using ASTM methods ASTM D4057-88 and one of ASTM D2622-94, ASTM D4294-98, ASTM D1552-95 or ASTM D129-91 or more recent editions adopted and incorporated by reference in Rule 62-297.440(1), F.A.C. Alternately, after written notification to and approval by the Department, the permittee may use other DEP Air Program-approved methods, i.e. alternate sampling procedures, for sulfur in petroleum products. [Rule 62-4.070, F.A.C.]

**B11.** The permittee shall maintain records to demonstrate that the sulfur content, by weight, of each shipment of new fuel oil and that the sulfur content was determined in accordance with the methods listed in Specific Condition No. B10. of this permit section. [Rule 62-4.070, F.A.C.]



**B12.** In order to demonstrate compliance with Specific Condition No. **B1.**, **B2.** and **B3.** of this permitting section; and Specific Condition No. **B13c.** of this permit section, the permittee shall maintain a log at the facility for a period of at least 5 years from the date the data is recorded. The log shall contain the following:

Monthly

- a) designation of the month and year of operation for which the records are being tabulated;
- b) consecutive 12-month total process rate;
- c) consecutive 12-month total of the amount of fuel combusted;
- d) consecutive 12-month total of NO<sub>x</sub> emissions, CO emissions, SO<sub>2</sub> emissions; and
- e) fuel records relating to Specific Condition Number **B13c.** of this permitting section.

**This includes fuel records to demonstrate that the sulfur content of each shipment of new fuel oil as required by Specific Condition No. B11. of this permitting section.**

Note: A consecutive 12 months total is equal to the total for the month in question plus the totals for the eleven months previous to the month in question. A consecutive 12-months total treats each month of the year as the end of a 12-months period. A 12-months total is not a year-to-date total. Facilities that have not been operating for 12 months should retain 12 months totals using whatever number of months of data are available until such a time as a consecutive 12 months total can be maintained each month. **The monthly logs shall be completed by the end of the following month.**

[Rule 62-4.070(3), F.A.C.]

**B13.** The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- c. Records of monitoring information shall include:
  - (a) The date, exact place, and time of sampling or measurements;
  - (b) The person responsible for performing the sampling or measurements;
  - (c) The dates analyses were performed;
  - (d) The person responsible for performing the analyses;
  - (e) The analytical techniques or methods used;
  - (f) The results of such analyses. [Rule 62-4.070(3), F.A.C.]





**FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION**

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RICK SCOTT  
GOVERNOR

CARLOS LOPEZ-CANTERA  
LT. GOVERNOR

HERSCHEL T. VINYARD JR.  
SECRETARY

**PERMITTEE**

Omni Waste of Osceola County, LLC -  
JED Solid Waste Management Facility  
1501 Omni Way  
St. Cloud, FL 34773

Air Permit No. 0970079-011-AC/PSD-FL-429

Expires: September 11, 2024

Facility ID No. 0970079

*Authorized Representative:*

Mr. Michael Kaiser, Region Engineer

Project: JED Solid Waste Management Facility Expansion

**PROJECT**

The existing JED Landfill will be expanded from its current (existing) capacity of 16.2 million tons to an estimated 81.5 million tons. A gas collection & control system will be installed under the expansion into additional cells. All of the landfill gas (LFG) generated will be either routed and combusted in engines or in open flares. The JED landfill currently has one 3,600 scfm open flare. Two (2) open flares with a total flaring capacity of 7,200 scfm and twelve (12) Landfill Gas-to-Energy (LFGTE) CAT® G3520C engines will be added in PSD Phase 1. In PSD Phase 2 (full built-out), two (2) additional open flares with a total flaring capacity of 7,200 scfm will be added. The new landfill gas-to-energy (LFGTE) plant which is comprised of the 12 engines will be classified under electric generation - sanitary services under Standard Industrial Classification (SIC) No. 4953.

The proposed expansion will be collocated with the existing JED Landfill, which is located in Osceola County at 1501 Omni Way, St. Cloud, Florida. The UTM Coordinates for the JED Landfill are: Zone 17, 491.6 East and 3102.9 North. Latitude is: 28°03'6.5" North; and, Longitude is: 81°05'8.4" West.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix CF of Section 4 of this permit

**STATEMENT OF BASIS**

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida

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

[www.dep.state.fl.us](http://www.dep.state.fl.us)



**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Mr. Michael Kaiser, OWOC-JED: [michael.kaiser@progressivewaste.com](mailto:michael.kaiser@progressivewaste.com)

Mr. Kennard F. Kosky, P.E., Golder Associates Inc.: [kkosky@golder.com](mailto:kkosky@golder.com)

Mr. Tom Lubozynski, DEP CD: [tom.lubozynski@dep.state.fl.us](mailto:tom.lubozynski@dep.state.fl.us)

Ms. Heather Ceron, U.S. EPA Region 4: [ceron.heather@epa.gov](mailto:ceron.heather@epa.gov)

Ms. Lynn Searce, DEP OPC: [lynn.searce@dep.state.fl.us](mailto:lynn.searce@dep.state.fl.us)

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.



## SECTION 1. GENERAL INFORMATION

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### FACILITY DESCRIPTION

The existing JED Landfill facility is located in Osceola County approximately 60 kilometers (km) (38 miles) southeast of downtown Orlando. The JED Landfill is an open Class I Landfill with a municipal solid waste (MSW) design capacity greater than 2.5 million megagrams (Mg) by mass or 2.5 million cubic meters by volume. This landfill began receiving solid waste in January 2004. The JED Landfill is currently operating under Title V air operation Permit No. 0970079-009-AV.

The facility currently operates one 3,600-scfm open flare (E.U. ID No. 002) used as the primary flare, which was installed in 2009. The open flare is not equipped with a bypass in which LFG can bypass the control device in an uncombusted manner.

### PROPOSED PROJECT

The proposed project is for the JED Solid Waste Management Facility Expansion.

The permittee is proposing flares and a LFGTE plant to accommodate the LFG generated by the full build-out of the JED Landfill from the existing capacity of 16.2 million tons to an estimated 81.5 million tons. All of the LFG collected at the JED Landfill will be combusted in the LFGTE plant and/or open flares. At capacity, the LFGTE plant will use LFG to fire up to 12 CAT® G3520C. The 12 engines will be capable of generating a total of 19.2 MW of electricity (1.6 MW per CAT® G3520C). The generation capacity varies with ambient temperature and may go up to 1.63 MW per engine if the ambient temperature is below 90°F.

The existing JED Landfill is currently operating one open flare with a maximum capacity of 3,600 scfm of LFG. The additional flares are required to flare the maximum potential LFG estimated to be collected at the landfill in 2041 when the landfill is expected to be fully built out. The additional flares and the LFGTE plant will be constructed in two PSD phases:

- PSD Phase 1 - Two open candlestick utility flares (total additional flaring capacity of 7,200 scfm to accommodate total LFG collection up of 10,800 scfm). The LFGTE plant with 12 CAT® G3520C engines.
- PSD Phase 2 - Two additional open candlestick utility flares (total additional flaring capacity of 7,200 scfm of LFG) to achieve a total facility-wide flaring capacity of up to 18,000 scfm, which is necessary for the full build-out LFG collection capacity of 15,845 scfm.

The first phase of the project is estimated to be completed within 10 years of receiving the permit. Additional flares in the second phase of the project will be required once the gas generation potential exceeds 10,800 scfm and therefore, the second phase is expected to start in 2024. As shown in the LFG gas curve presented in Appendix A of the permit application, 10,910 scfm of the LFG will be collected at the landfill in 2025.

The project will include installation of a gas collection & control system (GCCS) for the additional cells and routing of LFG from the GCCS to the flares and to the CAT® engines after being processed in a gas treatment and conditioning system. The current GCCS was installed and is operated in accordance with NSPS found in 40 CFR 60, Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills. Expansion of the system to accommodate the additional LFG gas and modification to the system to connect to the additional flares and LFGTE plant will be in accordance with Subpart WWW requirements.

The LFG treatment and conditioning system associated with the LFGTE plant will include the following:

- Initial gas dewatering, utilizing a moisture knock-out vessel;
- Gas compressor and blowers;
- Air-to-gas coolers and de-watering; and,
- Removal of particulate matter larger than 10 microns from the LFG.

This LFG treatment system meets the current U.S. EPA determinations for a treatment system that processes LFG for subsequent use. Additionally, in accordance with NSPS Subpart WWW, no LFG will be vented to the



## SECTION 1. GENERAL INFORMATION

atmosphere from the gas treatment system. When the LFG is routed to the LFGTE plant, the LFG will comply with the requirements of 40 CFR 60.752(b)(2)(iii)(C).

All 12 of the CAT® G3520C engines will be located in an enclosed building (east and west). Exhaust from each engine will be routed to the atmosphere via individual vertical exhaust stacks, each equipped with a silencer and located in the north side of the building.

LFG collected at the landfill will be filtered, compressed, and treated to remove the moisture prior to combustion in the flares or in the engines. The permittee is also proposing to install equipment to treat LFG for the purpose of reducing the concentrations of hydrogen sulfide (H<sub>2</sub>S) in the LFG. When the LFGTE plant will be operating (one or all engines), excess LFG that are not combusted in the engines will be combusted in the flares. The LFGTE plant may be expanded in the future depending on adequate power market and/or alternative energy use. Separate permit application(s) shall be submitted for such an expansion.

The proposed project is considered an expansion of the existing facility and is subject to PSD preconstruction review for CO, NO<sub>x</sub>, PM, PM<sub>10</sub>, PM<sub>2.5</sub>, VOC, NMOC and GHG emissions in accordance with Rule 62-212.400, F.A.C.

The proposed project will add the following *new* emissions units (E.U.s):

E.U. ID No.	E.U. Brief Description(s)
005	<i>new</i> MSW Class I Landfill (expansion) with Gas Extraction - Cells 11-23
006	<i>new</i> LFGTE Plant - 12 LFG-fired Engines
007	<i>new</i> 4 Open Candlestick Utility Flares

The proposed project affects the following *existing* emissions units (E.U.s):

E.U. ID No.	E.U. Brief Description(s)
001	<i>existing</i> MSW Class I Landfill with Gas Extraction - Cells 1-10
002	<i>existing</i> Open Candlestick Utility Flare, Flare #1

### FACILITY REGULATORY CLASSIFICATIONS

- The existing facility is not classified as a Prevention of Significant Deterioration (PSD) major facility. The proposed project is subject to PSD preconstruction review in accordance with Rule 62-212.400, F.A.C.
- The existing facility is not a major source of hazardous air pollutants (HAP). However, the proposed project will not cause it to become a major source of HAP.
- The existing facility is as a Title V Source in accordance with Rule 62-210.200, F.A.C.
- The proposed project includes units subject to applicable New Source Performance Standards (NSPS) in Title 40, Part 60 of the Code of Federal Regulations.
- The proposed project includes units subject to applicable National Emissions Standards for Hazardous Air Pollutants (NESHAP) in Title 40, Part 63 of the Code of Federal Regulations.
- The proposed project includes no units subject to the acid rain or CAIR provisions of the Clean Air Act.



## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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1. Permitting Authority: The Permitting Authority for this project is the Office of Permitting and Compliance in the Division of Air Resource Management of the Department of Environmental Protection (Department). The mailing address for the Office of Permitting and Compliance is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Central District Office (Compliance Authority) at 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767; Telephone: (407) 894-7555, Fax: (407) 897-2966.
3. Appendices: The following Appendices are attached as a part of this permit and the permittee must comply with the requirements of the appendices:

Appendix CF	Citation Formats and Glossary of Common Terms;
Appendix GC	General Conditions;
Appendix CC	Common Conditions;
Appendix CTR	Common Testing Requirements;
Appendix BD	Final BACT Determinations;
Appendix ATM	U.S. EPA Alternative Test Method ALT-096 (TECO 55I);
Appendix A	NSPS 40 CFR 60, Subpart A - General Provisions;
Appendix WWW	NSPS 40 CFR 60, Subpart WWW - Municipal Solid Waste Landfills;
Appendix JJJJ	NSPS 40 CFR 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines;
Appendix A1	NESHAP 40 CFR 63, Subpart A - General Provisions;
Appendix AAAA	NESHAP 40 CFR 63, Subpart AAAA - Municipal Solid Waste Landfills; and,
Appendix ZZZZ	NESHAP 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Construction and Expiration. The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires. [Rules 62-4.070(4), 62-4.080 & 62-210.300(1), F.A.C.]
8. Source Obligation:



## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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- (a) Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit.
- (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 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.
- (c) 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.]

9. Approved Phases of a Phased Construction Project: This permit contains an approved phased construction project. In accordance with Rule 62-212.400(12)(a), F.A.C., each phase must commence construction within 18 months of the commencement date established by the Department in this permit.

The existing JED Landfill is currently operating one open flare with a maximum capacity of 3,600 scfm of LFG. Additional flares and a LFGTE plant are required to combust the maximum potential LFG estimated to be collected at the landfill in by the year 2041 when the landfill is expected to be fully built out. The additional flares and the LFGTE plant shall be constructed in two major PSD phases.

- *PSD Phase 1* - Two open candlestick utility flares (total additional flaring capacity of 7,200 scfm to accommodate total LFG collection up of 10,800 scfm). The LFGTE plant with 12 CAT® G3520C engines. During this phase, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time, approval to construct PSD Phase 1 authorized by this permit shall expire. This means that construction defined as the expansion of the new landfill (EU 005) and the installation of flares, engines, the GCCS, the LFG conditioning system and/or the Phase 1 LFG H<sub>2</sub>S removal system cannot cease for a period of 18 months or more.
- *PSD Phase 2* - Two additional open candlestick utility flares (total additional flaring capacity of 7,200 scfm of LFG) to achieve a total facility-wide flaring capacity of up to 18,000 scfm, which is necessary for the full build-out LFG collection capacity of 15,845 scfm. During this phase, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time, approval to construct PSD Phase 2 authorized by this permit shall expire. This means that construction defined as the as the expansion of the new landfill (EU 005) and the installation of flares and the continued installation of GCCS and/or the Phase 2 LFG H<sub>2</sub>S removal system cannot cease for a period of 18 months or more.

The first phase (PSD Phase 1) of the project is estimated to be completed within 10 years of receiving the permit. Additional flares in the second phase (PSD Phase 2) of the project will be required once the gas generation potential exceeds 10,800 scfm and therefore, the second phase (PSD Phase 2) is expected to start around the year 2024.

If the requirements of Rule 62-212.400(12)(a), F.A.C. are not met, the permittee must submit a revised PSD BACT analysis and proposals to the Department.

[Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rule 62-212.400(12)(a), F.A.C.]



## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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10. Approved Phases of a Phased Construction Project - Reporting: The permittee shall provide a written notification to the Department of the actual date of commencement for each PSD phase of the approved phased construction project. In addition, 18 months after the issuance of the final version of this permit and every 18 months thereafter, the permittee shall submit a written report to both the Compliance Authority and the Permitting Authority describing what construction activities have occurred during the previous 18 months. This report shall be submitted within 60 days of the end of each 18 month reporting period. [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rule 62-212.400(12)(a), F.A.C.]
11. Approved Phases of a Phased Construction Project - New Standards: The emission units under this phased construction project shall meet any new applicable requirements, i.e., newly promulgated federal and/or state specific emission limiting standards. [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rule 62-212.400(12)(a), F.A.C.]
12. Title V Air Operation Permit: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after completing the required work and commencing operation. To apply for a Title V air operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to each Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]
13. Objectionable Odors Prohibited: No person shall 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.]  
*{Note: An objectionable odor is defined in Rule 62-210.200(Definitions), F.A.C., as 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.}*
14. Unconfined Emissions of 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. Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter. General reasonable precautions include the following: a. Paving and maintenance of roads, parking areas and yards; b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing; c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities; d. 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 particulates from becoming airborne; e. Landscaping or planting of vegetation; f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter; g. Confining abrasive blasting where possible; and h. Enclosure or covering of conveyor systems. [Rule 62-296.320(4)(c), F.A.C.]



## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### A. JED Landfill (E.U. ID Nos. 001 & 005)

This subsection of the permit addresses the following emission units:

E.U. ID No.	E.U. Brief Description(s)
001	<i>The E.U. ID No. 001's description as part of this project is administratively corrected</i> from: MSW Class I Landfill with Gas Extraction to: existing MSW Class I Landfill with Gas Extraction - Cells 1-10
005	new MSW Class I Landfill (expansion) with Gas Extraction - Cells 11-23

The existing JED Landfill will be expanded from the existing capacity of 16.2 million tons to an estimated new capacity 81.5 million tons.

The JED landfill, a Class I landfill, currently accepts municipal solid waste (MSW). The current annual waste acceptance is approximately 1,600,000 tons. The JED landfill commenced construction in April 2003 and started receiving waste in January 2004. The facility is currently authorized to construct 10 landfill cells (cells 1-10) for a total footprint of 123 acres. At full build-out, the landfill will have 23 cells (cells 11-23) for a total footprint of 360 acres.

Non-methane organic compound (NMOC) emissions from the JED landfill had been calculated to be greater than 50 Mg per year, therefore, gas collection & control systems (GCCS) had been and will continue to be required.

As part of this proposed project, the permittee proposed to install additional equipment at the JED Landfill to treat LFG for the purpose of reducing the concentrations of hydrogen sulfide (H<sub>2</sub>S) in the JED landfill gas (LFG). This equipment is referred to as the H<sub>2</sub>S scrubbing system in this permit. Reducing H<sub>2</sub>S content prior to combustion in either the engines and/or the flares effectively reduces SO<sub>2</sub> emissions. With the proposed H<sub>2</sub>S scrubbing system installed & operational potential SO<sub>2</sub> emissions from the engines and flares were calculated to be 38.9 & 38.2 TPY in the proposed project, just below the PSD SER of 40 TPY. To demonstrate that the proposed project escapes PSD for SO<sub>2</sub> emissions this permit contains specific conditions for reasonable assurances.

The following conditions apply to the *existing* and *new* landfill (expansion).

#### PERFORMANCE RESTRICTIONS

1. Permitted Capacity: The existing JED Landfill may be expanded to an estimated new capacity of 81.5 million tons. [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rules 62-4.160(2) and 62-210.200, *PTE*, F.A.C.]
2. LFG Collection & Control System: The project shall include installation of a GCCS for the additional cells and routing of the LFG from the GCCS to the flares and to the CAT<sup>®</sup> engines after being processed in a gas treatment & conditioning system. [Application No. 0970079-011-AC/PSD-FL-429; and, Rule 62-212.400, *PSD - BACT Determination*, F.A.C.]
3. Applicable NSPS Provisions: The JED Landfill is subject to, and shall continue to comply with, the applicable provisions in NSPS Subpart A (General Provisions) and NSPS Subpart WWW (Municipal Solid Waste Landfills) of 40 CFR 60, which are identified in Appendix A and Appendix WWW of this permit. [NSPS Subparts A and WWW in 40 CFR 60; and, Rule 62-204.800, F.A.C.]
4. Applicable NESHAP Provisions: The JED Landfill is subject to, and shall continue to comply with, the applicable provisions in NESHAP Subpart A (General Provisions) and NESHAP Subpart AAAA (Municipal Solid Waste Landfills) of 40 CFR 63, which are identified in Appendix A1 and Appendix AAAA of this permit. [NESHAP Subparts A and AAAA in 40 CFR 63; and, Rule 62-204.800, F.A.C.]



## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### A. JED Landfill (E.U. ID Nos. 001 & 005)

*Note: The following specific conditions are related specifically to the new H<sub>2</sub>S Scrubbing System:*

#### EQUIPMENT

5. New H<sub>2</sub>S Scrubbing System: The permittee shall install, maintain and operate a two-stage H<sub>2</sub>S scrubbing system for the JED LFG with the first stage constructed and operated in the first PSD phase ("PSD Phase 1") and the second stage constructed and operated in the second PSD phase ("PSD Phase 2"). The two stages shall have the following design efficiencies:

- a. First stage - Reduce LFG H<sub>2</sub>S concentration to < 160 ppmv; and,
- b. Second stage - Reduce LFG H<sub>2</sub>S concentration to < 65 ppmv.

The H<sub>2</sub>S scrubbing system shall achieve the H<sub>2</sub>S reduction concentrations for each stage (these reductions restrict SO<sub>2</sub> emissions from the combustion of the LFG in the engines and the flares). The H<sub>2</sub>S scrubbing system shall be maintained in accordance with the manufacturer's recommendations or determined best practices. [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rules 62-4.160(2) and 62-212.400(12), *Source Obligation - escape-PSD*, F.A.C.]

6. H<sub>2</sub>S Scrubbing System Selected Notification: The permittee is required to select an H<sub>2</sub>S scrubbing system that will achieve the reduced H<sub>2</sub>S concentrations of this permit for the JED LFG. The permittee provided the following types of reduction technologies from which they may select from: Biological Conversion to Sulfate, Biological Conversion to Elemental Sulfur, Physical-Chemical Conversion to Elemental Sulfur (LOW-CAT<sup>™</sup> process by Merichem or equivalent, Paques/THIOPAQ<sup>®</sup> Process or equivalent), Physical/Chemical Sulfur Removal System (ECO-TEC<sup>™</sup>, Nrgtek, Inc. or equivalent), Sacrificial Media Systems; and, Packed Tower Chemical Scrubber. The permittee shall inform the Department upon selection of the specific H<sub>2</sub>S scrubbing system to be installed under this project, i.e., biological conversion/treatment, etc. [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rules 62-4.160(2) and 62-212.400(12), *Source Obligation - escape-PSD*, F.A.C.]

*{Note: The permittee is not restricted to these specific technologies, these were simply the ones that had been identified in the permit application.}*

7. H<sub>2</sub>S Scrubbing System Selected Information: The permittee shall provide detailed information on the selected specific H<sub>2</sub>S scrubbing system selected as soon as it becomes available. The details shall include but not be limited to the manufacturer information (Make, Model No., etc.), manufacturer brochure, actual process/operation diagram for the technology selected, facility (plant) layout showing where the equipment will be installed if different from the application submitted, etc. [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rules 62-4.160(2) and 62-212.400(12), *Source Obligation - escape-PSD*, F.A.C.]
8. Operating & Maintenance (O&M) Procedures: All operators and supervisors shall be properly trained to operate and maintain the H<sub>2</sub>S scrubbing system in accordance with the guidelines and procedures established by the manufacturer. The training shall include good operating & maintenance practices. [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rules 62-4.160(2) and 62-212.400(12), *Source Obligation - escape-PSD*, F.A.C.]

#### MONITORING REQUIREMENTS

9. Semi-Annual LFG Sampling/Analysis - H<sub>2</sub>S Content: The sulfur content of the H<sub>2</sub>S scrubbing system's outlet concentration shall be sampled semi-annually, analyzed and the results provided to the compliance authority. Based on the sampling results and Rule 62-297.310(7)(b), F.A.C., the Department may request additional gas sampling and analyses. [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rules 62-4.160(2) and 62-212.400(12), *Source Obligation - escape-PSD*, F.A.C.]
10. LFG - H<sub>2</sub>S Content Analysis: The owner or operator shall analyze the sulfur content of the H<sub>2</sub>S scrubbing system's outlet concentration using ASTM Methods D1072-90 or D5504-01, or equivalent, and later



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## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

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### A. JED Landfill (E.U. ID Nos. 001 & 005)

methods. The LFG shall be collected and transported in an appropriate canister (e.g. SUMMA®, Bottle-Vac Sampler or equivalent). [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rules 62-4.160(2) and 62-212.400(12), *Source Obligation - escape-PSD*, F.A.C.]

#### INITIAL COMPLIANCE REQUIREMENTS

11. Compliance - H<sub>2</sub>S Concentration Reductions: To demonstrate initial compliance that the selected H<sub>2</sub>S scrubbing system achieves the design H<sub>2</sub>S reduction efficiencies for each stage, within 30 days of completion of each stage the permittee shall notify the compliance authority of the results with a copy to the permitting authority. [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rules 62-4.160(2) and 62-212.400(12), *Source Obligation - escape-PSD*, F.A.C.]

#### RECORDKEEPING & REPORTING

12. H<sub>2</sub>S Content Recordkeeping for LFG: The owner or operator shall maintain records of the sulfur content analysis of the H<sub>2</sub>S scrubbing system's outlet concentrations. [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rules 62-4.160(2) and 62-212.400(12), *Source Obligation - escape-PSD*, F.A.C.]
13. H<sub>2</sub>S Content Sampling & Analysis Results for LFG: The results of the sulfur content sampling & analysis of the H<sub>2</sub>S scrubbing system's outlet concentrations shall be provided to the compliance authority. Based on the sampling results and Rule 62-297.310(7)(b), F.A.C., the Department may request additional gas sampling and analyses of the JED LFG. [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rules 62-4.160(2) and 62-212.400(12), *Source Obligation - escape-PSD*, F.A.C.]



### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### B. New LFGTE Plant: Twelve (12) LFG-fired Engines (E.U. ID No. 006)

This subsection of the permit addresses the following emission units:

E.U. ID No.	E.U. Brief Description(s)
006	<i>new</i> Landfill Gas-to-Energy (LFGTE) Plant 12 LFG-fired Lean-burn Reciprocating Internal Combustion Engine/Generator Sets

This emissions unit is the Landfill Gas-to-Energy (LFGTE) Plant which is comprised of 12 LFG-fired engines.

The LFG-fired engines shall be Caterpillar Model G3520C or equivalent. The CAT® G3520C internal combustion engine is a lean-burn water-cooled engine with a design power generation rating of 2,242 brake-horsepower (bhp) and a maximum fuel consumption rating of 6,511 Btu/bhp-hr (lower heating value, LHV). The maximum heat input rating for each engine is 14.6 million British thermal units per hour (MMBtu/hr, LHV) (engine power at 100% load is 2,241 bhp and nominal engine fuel consumption is 6,511 Btu/bhp-hr, LHV). Each engine will be connected to an electric power generator with a nominal rating of 1.6 MW. Using a fuel consumption tolerance of +2.5% (Caterpillar data), the maximum heat input could be 14.96 MMBtu/hr, LHV, which is equivalent to 16.61 MMBtu/hr, HHV. Exhaust gases from each engine will be vented through a 60-foot (ft) high stack. The exhaust parameters and other design parameters for the engine were provided in the permit application in Appendix C.

*{Permitting Note: In accordance with Rule 62-212.400, PSD, F.A.C., the above engines are subject to Best Available Control Technology (BACT) determinations for the following air pollutants: CO, NOx, PM, PM<sub>10</sub>, PM<sub>2.5</sub>, VOC, NMOC and GHG. The final BACT determinations are presented in the appendices of this permit. Other emissions standards and performance restrictions specified in this permit allow the emission units to escape PSD preconstruction review for sulfur dioxide (SO<sub>2</sub>) emissions.}*

#### EQUIPMENT

- LFG Engine/Generator Sets:** The permittee is authorized to install and operate 12 lean-burn, spark-ignited reciprocating internal combustion engine/generator sets (Caterpillar Model G3520C or equivalent) that will fire LFG with the following nominal design specifications per engine: a maximum engine rating of 2,242 bhp at 100% load; a nominal electrical generator rating of 1.6 MW; and a heat input rate of approximately 16.61 MMBtu/hour, HHV from LFG.
  - Each engine shall be equipped with an air-to-fuel ratio controller and electronic ignition timing to maintain efficient fuel combustion.
  - Each engine shall be equipped with an automatic fail-safe block valve which must be designed to stop the flow of LFG in the event of an engine failure. Excess LFG not fired in the engines shall be flared or free vented until the facility is required to meet the applicable collection and control system requirements in accordance with NSPS Subpart WWW in 40 CFR 60.
  - Each engine shall be equipped with a non-resettable elapsed time meter to indicate the elapsed engine operating time in cumulative hours.
  - A gas flow meter shall be installed to monitor the total volumetric flow rate of LFG to the engines.[Application No. 0970079-011-AC/PSD-FL-429; Rules 62-4.070(1)&(3), *Reasonable Assurance*, 62-210.200, *Definitions - Potential to Emit (PTE)*, and 62-212.400, *PSD - BACT Determination*, F.A.C.; and, NESHAP Subpart ZZZZ.]

*{Permitting Note: The heat input rate is based on 100% load (2,242 bhp), a LFG higher heating value (HHV) of 446 British thermal units per standard cubic foot (Btu/scf) and an approximate LFG firing rate of 550 scfm per engine at a methane content of 44%.}*
- LFG Treatment & Conditioning System for Engines:** The permittee shall install a LFG treatment & conditioning system that includes initial gas dewatering (moisture knock-out vessel), gas compressors and blowers, air-to-gas coolers or equivalent and particulate removal. The particulate filtration system shall be



### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### B. New LFGTE Plant: Twelve (12) LFG-fired Engines (E.U. ID No. 006)

designed to remove particulate matter larger than 10 microns via primary and polishing filters. The gas treatment system shall not be equipped with atmospheric vents. [Application No. 0970079-011-AC/PSD-FL-429; and, Rule 62-212.400, *PSD - BACT Determination*, F.A.C.]

3. Hours of Operation: The new engine/generator sets may operate continuously (i.e., 8,760 hours/year). [Application No. 0970079-011-AC/PSD-FL-429; and, Rule 62-210.200, *PTE*, F.A.C.]

#### PERFORMANCE RESTRICTIONS

4. Permitted Capacity: Each LFG engine has a maximum power rating of 2,242 bhp at 100% load (approximately 16.61 MMBtu/hour, HHV). The electrical generator set has a nominal power rating of 1,600 kilowatts (kW). [Rule 62-210.200, *PTE*, F.A.C.]
5. Authorized Fuel: Only H<sub>2</sub>S scrubbed, treated & conditioned LFG shall be fired in the engine/generator sets. *{Permitting note: Propane may be used as a startup fuel.}* [Application No. 0970079-011-AC/PSD-FL-429; and, Rules 62-212.400, *PSD - BACT Determination*, and Rule 62-212.400(12), *Source Obligation - escape-PSD*, F.A.C.]
6. Applicable NSPS Provisions: The LFG engines are subject to, and shall comply with, the applicable provisions in NSPS Subpart A (General Provisions) and NSPS Subpart JJJJ (Stationary Spark Ignition Internal Combustion Engines) of 40 CFR 60, which are identified in Appendix A and Appendix JJJJ of this permit. [NSPS Subparts A and JJJJ in 40 CFR 60; and, Rule 62-204.800, F.A.C.]
7. Applicable NESHAP Provisions: The LFG engines are subject to, and shall comply with, the applicable provisions in NESHAP Subpart A (General Provisions) and NESHAP Subpart ZZZZ (Reciprocating Internal Combustion Engines) of 40 CFR 63, which are identified in Appendix A1 and Appendix ZZZZ of this permit. [NESHAP Subparts A and ZZZZ in 40 CFR 63; and, Rule 62-204.800, F.A.C.]

#### EMISSION STANDARDS & LIMITATIONS

8. CO, VOC, NMOC, NO<sub>x</sub>, PM/PM<sub>10</sub>/PM<sub>2.5</sub> and GHG Emissions: The permittee shall minimize CO, VOC, NMOC, NO<sub>x</sub>, PM/PM<sub>10</sub>/PM<sub>2.5</sub> and GHG emissions by installing, operating and maintaining the required LFG treatment systems [H<sub>2</sub>S scrubbing system and treatment & conditioning system] as well as maintaining the air-to-fuel ratio to ensure efficient combustion. [Rule 62-212.400, *PSD - BACT Determination*, F.A.C.]
9. Carbon Monoxide (CO): The advanced lean burn engine design, use of treated LFG, good combustion practices and proper maintenance minimizes CO emissions. CO emissions from each engine/generator set shall not exceed 3.5 gram per brake horsepower hour (g/bhp-hour) and 17.3 pounds/hour (lbs/hour). *{Permitting Note: For each engine/generator equivalent to 75.8 TPY of CO emissions. Compliance with the BACT limit assures compliance with the higher NSPS Subpart JJJJ limit of 5.0 g/bhp-hr.}* [NSPS Subparts A and JJJJ in 40 CFR 60; Rules 62-204.800 and, 62-212.400, *PSD - BACT Determination*, F.A.C.]
10. Volatile Organic Compounds (VOC): The advanced lean burn engine design, use of treated LFG, good combustion practices and proper maintenance minimizes VOC emissions. VOC emissions from each engine/generator set shall not exceed 0.56 g/bhp-hour and 2.77 lbs/hour. [NSPS Subparts A and JJJJ in 40 CFR 60; Rules 62-204.800 and, 62-212.400, *PSD - BACT Determination*, F.A.C.] *{Permitting Note: VOC was assumed to be 100% NMOC. For each engine/generator equivalent to 12.12 TPY of CO emissions.}*
11. Non-Methane Organic Compounds (NMOC): The advanced lean burn engine design, use of treated LFG, good combustion practices and proper maintenance minimizes NMOC emissions. NMOC emissions from each engine/generator set shall not exceed 0.85 g/bhp-hour and 4.2 lbs/hour. [Rule 62-212.400, *PSD - BACT Determination*, F.A.C.] *{Permitting Note: For each engine/generator equivalent to 18.4 TPY of CO emissions.}*



### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### B. New LFGTE Plant: Twelve (12) LFG-fired Engines (E.U. ID No. 006)

12. Nitrogen Oxides (NO<sub>x</sub>): The advanced lean burn engine design, use of treated LFG, good combustion practices and proper maintenance minimizes NO<sub>x</sub> emissions. NO<sub>x</sub> emissions from each engine/generator set shall not exceed 0.60 g/bhp-hour and 3.0 lbs/hour. [Rule 62-212.400, PSD - BACT Determination, F.A.C.]  
*{Permitting Note: For each engine/generator equivalent to 13 TPY of NO<sub>x</sub> emissions.}*
13. Particulate Matter (PM) - PM/PM<sub>10</sub>/PM<sub>2.5</sub>: The advanced engine design, use of treated LFG, good combustion practices and proper maintenance minimizes PM/PM<sub>10</sub>/PM<sub>2.5</sub> emissions. The LFG shall also be treated to remove PM larger than 10 microns prior to combusting in the engines. In addition, as determined by EPA Method 9, visible emissions from each engine/generator set shall not exceed 10% opacity, based on a six-minute average. Visible emissions (VE) shall serve as a surrogate for PM/PM<sub>10</sub>/PM<sub>2.5</sub> emissions. [Rule 62-212.400, PSD - BACT Determination, F.A.C.]  
*{Permitting Note: Based on these work practice standards, the maximum PM/PM<sub>10</sub>/PM<sub>2.5</sub> emissions from each engine/generator were estimated to be 0.24 g/bhp-hour, 1.2 lbs/hour and 5.2 tons/year.}*
14. Visible Emissions (VE): VE from each engine/generator set exhaust shall not exceed 10% opacity. [Rule 62-212.400, PSD - BACT Determination, F.A.C.]
15. Sulfur Dioxide (SO<sub>2</sub>) Emissions:
- a. To ensure that PSD is avoided, SO<sub>2</sub> emissions shall not exceed 38.9 tons per consecutive 12 months from all 12 LFG-fired engines (combined). Compliance with this SO<sub>2</sub> emissions cap shall be demonstrated on a 12-month rolling basis using the following information: the sulfur level in the scrubbed LFG; the amount of LFG fired in each engine; and, the assumption that all sulfur is converted to SO<sub>2</sub>.
  - b. SO<sub>2</sub> emissions from each engine/generator set shall not exceed 45 pounds/million standard cubic feet (lbs/MMscf). *{Permitting Note: For each engine/generator equivalent to 0.68 lbs/hour and 3.24 TPY.}*
- [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rules 62-4.160(2) and 62-212.400(12), Source Obligation - escape-PSD, F.A.C.]
16. Greenhouse Gases (GHG): The advanced engine design, use of treated LFG, good combustion practices and proper maintenance minimize GHG emissions (being primarily N<sub>2</sub>O & CH<sub>4</sub>). The collection of the LFG and subsequent combustion in the engines along with the energy production facility also minimize GHG emissions. NO<sub>x</sub> & CO emissions shall serve as primary surrogates for GHG emissions (being primarily N<sub>2</sub>O & CH<sub>4</sub>). [Rule 62-212.400, PSD - BACT Determination, F.A.C.]

#### COMPLIANCE DEMONSTRATION (TESTING) REQUIREMENTS

17. Test Requirements: During each required compliance stack test, the permittee shall operate a tested LFG engine at permitted capacity (90% to 100% of 2,242 bhp). The permittee shall notify the Compliance Authority in writing at least 15 days prior to any scheduled stack tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix CTR (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9., F.A.C.]  
*{Permitting Note: Although the NSPS provides for a 30-day test notification, a 15-day notice is sufficient in Florida.}*
18. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
7 or 7E	Determination of NO <sub>x</sub> Emissions from Stationary Sources
9	Visual Determination of the Opacity (VE) of Emissions from Stationary Sources
10	Determination of CO Emissions from Stationary Sources <i>{Note: The method shall be based on a continuous sampling train.}</i>



### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### B. New LFGTE Plant: Twelve (12) LFG-fired Engines (E.U. ID No. 006)

Method	Description of Method and Comments
19	Determination of SO <sub>2</sub> Removal Efficiency and PM, SO <sub>2</sub> , and NO <sub>x</sub> Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)
25C	Method for Determining NMOC in Landfill Gases
TECO-55I	ALT-096 Direct total Non-Methane Hydrocarbon Analyzer

The above methods are described in Appendix A of 40 CFR 60 and are 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. [Rules 62-204.800 and 62-297.100, F.A.C.; and, Appendix A of 40 CFR 60.]

19. Initial Compliance Tests - CO, VOC, NMOC, NO<sub>x</sub> & VE: Each engine shall be tested to demonstrate initial compliance with the emissions standards for CO, NO<sub>x</sub> and VOC under 40 CFR 60, Subpart JJJJ as well as the BACT standards of this permit. In addition, each unit shall be tested for opacity in accordance with EPA Method 9. Each engine shall be tested for NMOC in accordance with EPA Method 25C, or Method 25A and 18, or alternative test method ALT-096 (TECO-55I) as instructed in the EPA's alternative approval letter in Appendix ATM of this permit. The initial performance tests must be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial startup of each engine. [Rules 62-212.400, *PSD - BACT Determination* and 62-297.310(7)(a)1., F.A.C.; and, NSPS Subpart JJJJ of 40 CFR 60.]
20. Periodic Compliance Tests - CO, VOC, NMOC, NO<sub>x</sub> & VE: Every 8,760 engine hours or at least once every three years, whichever comes first, each engine shall be tested to demonstrate compliance with the emissions standards for CO, NO<sub>x</sub> and VOC under 40 CFR 60, Subpart JJJJ as well as the BACT standards of this permit. During these periodic tests, at least one engine shall also be tested for opacity in accordance with EPA Method 9 and NMOC in accordance with EPA Method 25C, or Method 25A and 18, or alternative test method ALT-096 (TECO-55I) as instructed in the EPA's alternative approval letter in Appendix ATM of this permit. [Rules 62-212.400, *PSD - BACT Determination* and 62-297.310(7)(a)1., F.A.C.; and, NSPS Subpart JJJJ of 40 CFR 60.]
21. Compliance Tests - PM/PM<sub>10</sub>/PM<sub>2.5</sub>: Since VE serves as a surrogate for PM/PM<sub>10</sub>/PM<sub>2.5</sub> emissions PM/PM<sub>10</sub>/PM<sub>2.5</sub> emissions testing is not required. Instead, demonstration of compliance with the PM/PM<sub>10</sub>/PM<sub>2.5</sub> BACT standards of this permit is through the VE testing. [Rules 62-212.400, *PSD - BACT Determination* and 62-297.310(7), F.A.C.]
22. Compliance Tests - GHG: Since NO<sub>x</sub> & CO emissions serves as primary surrogates for GHG emissions (being primarily N<sub>2</sub>O & CH<sub>4</sub>) GHG emissions testing is not required. Instead, demonstration of compliance with the GHG BACT standards of this permit is through the NO<sub>x</sub> & CO emissions testing. Low NO<sub>x</sub> emissions indicates low formation of N<sub>2</sub>O, a GHG gas. Low CO emissions is an indicator of complete combustion, i.e., conversion of CH<sub>4</sub> (a GHG gas) to CO<sub>2</sub> and water. [Rules 62-212.400, *PSD - BACT Determination* and 62-297.310(7)(a), F.A.C.]

#### MONITORING REQUIREMENTS

23. Gas Flow Meter Daily Records: Daily records shall be used to monitor and record the fuel usage for all engines combined with a separate fuel meter to measure the volumetric flow rate of the LFG. [NESHAP Subpart ZZZZ of 40 CFR 63.]



### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### B. New LFGTE Plant: Twelve (12) LFG-fired Engines (E.U. ID No. 006)

#### RECORDKEEPING & REPORTING

24. Test Reports: The required test reports 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. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA test, shall provide the applicable information identified in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.]
25. Monthly Records: Within ten business days following each month, the permittee shall observe and record the following information in a written log or electronic format accessible to the Department: number of hours of operation of each engine; total monthly LFG flow rate to each engine; and total SO<sub>2</sub> emissions for the month and previous 12-month period, for a rolling 12-month total. Emissions of SO<sub>2</sub> shall be calculated from the monthly LFG consumption as well as the analytical results for the sulfur contents of the LFG representative of the given month of operation based on the semi-annual sampling for that period. [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rules 62-4.160(2) and 62-212.400(12), *Source Obligation - escape-PSD*, F.A.C.]
26. Gas Flow Meter Report: An annual report shall be submitted including the following data:
- Fuel flow rate of the LFG and the heating values that were used in your calculations. You must also demonstrate that the percentage of heat input provided by LFG is equivalent to 10% or more of the total fuel consumption on an annual basis.
  - The operating limits provided in your federally enforceable permit, and any deviations from these limits.
  - Any problems or errors suspected with the meters.
- [NESHAP Subpart ZZZZ of 40 CFR 63.]
27. Annual Reporting in AOR: The total SO<sub>2</sub> emissions from all of the engines (combined) shall be reported in the AOR, along with the total LFG consumption for all of the engines (combined). The sulfur content shall also be included with the AOR. [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rules 62-4.160(2) and 62-212.400(12), *Source Obligation - escape-PSD*, F.A.C.]
28. Initial Notification: An Initial Notification shall be submitted no later than 120 days after you begin startup of the engine/generator sets. [NESHAP Subpart ZZZZ of 40 CFR 63.]



### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### C. New Four (4) Open Candlestick Utility Flares (E.U. ID No. 007)

This subsection of the permit addresses the following emission units:

E.U. ID No.	E.U. Brief Description(s)
002	<i>The E.U. ID No. 002's description as part of this project is administratively corrected from: Phase 1 - Class I Landfill Gas Collection System Flare #1 to: existing Open Candlestick Utility Flare, Flare #1</i>
007	<i>new 4 Open Candlestick Utility Flares</i>

This emissions unit is comprised of 4 open candlestick utility flares.

The JED Landfill currently operates a 3,600 scfm candle type open flare (Model No. PCFT1444I12, manufactured by LFG Specialties), which is used as the primary flare. Volumetric flow to the flare is measured using a thermal dispersion flow meter and flow is continuously recorded on a data recorder. The flare has an automatic propane pilot system and control panel that monitors the presence and temperature of pilot flame. The free cross-sectional area of the flare tip is 143.5 in<sup>2</sup> and the height of the flare is 58 feet above ground. The exit velocity of the combusted gas for the flare is 58.6 feet/second (LFG flow of 3,506 scfm and cross-sectional area of 143.5 in<sup>2</sup>). There will be no change to this flare as a result of the proposed expansion.

Additional open flares similar in model and size to the existing flare were proposed. Likely two 3,600 scfm open flares are planned for PSD Phase 1 and two more 3,600 scfm open flares are planned for PSD Phase 2. Note that the exact size and manufacturer of the flare may vary depending on availability and cost.

*{Permitting Note: In accordance with Rule 62-212.400, PSD, F.A.C., the above flares are subject to Best Available Control Technology (BACT) determinations for the following air pollutants: CO, NO<sub>x</sub>, PM, PM<sub>10</sub>, PM<sub>2.5</sub>, VOC, NMOC and GHG. The final BACT determinations are presented in the appendices of this permit. Other emissions standards and performance restrictions specified in this permit allow the emission units to escape PSD preconstruction review for sulfur dioxide (SO<sub>2</sub>) emissions.}*

#### EQUIPMENT

1. Flares: The permittee is authorized to install, operate and maintain four (4) open candlestick utility flares (LFG Specialties Model No. PCFT1444I12 or equivalent) that will fire LFG with the following nominal design specifications per flare: a maximum rating of 3,600 scfm; and, a maximum heat input rate of 106 MMBtu/hour, HHV from LFG.
  - a. Each flare shall be equipped with an automatic propane pilot system and control panel that monitors the presence and temperature of pilot flame.
  - b. The total LFG volumetric flow to each flare shall be measured using a thermal dispersion flow meter and flow shall be continuously recorded on a data recorder.

*{Permitting Note: The heat input rate is based on Phase 2 flaring-only case, a LFG higher heating value (HHV) of 577 Btu/scf and an approximate LFG firing rate of 3,061 scfm per flare at a methane content of 44%.}*

[Application No. 0970079-011-AC/PSD-FL-429; Rules 62-4.070(1)&(3), Reasonable Assurance, 62-210.200, Definitions - Potential to Emit (PTE), and 62-212.400, PSD - BACT Determination, F.A.C.]

2. Flares: The existing and new flares may be moved during the landfill expansion project. [Application No. 0970079-011-AC/PSD-FL-429.]
3. Hours of Operation: The new flares may operate continuously (i.e., 8,760 hours/year). [Application No. 0970079-011-AC/PSD-FL-429; and, Rule 62-210.200, PTE, F.A.C.]



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## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

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### C. New Four (4) Open Candlestick Utility Flares (E.U. ID No. 007)

#### PERFORMANCE RESTRICTIONS

4. Permitted Capacity: Each flare shall have a maximum rating of 3,600 scfm and a maximum heat input rate of 106 MMBtu/hour, HHV from LFG. [Rule 62-210.200, PTE, F.A.C.]
5. Authorized Fuel: Only H<sub>2</sub>S scrubbed LFG shall be fired in the flares. *{Permitting note: Propane may be used as a startup fuel.}* [Application No. 0970079-011-AC/PSD-FL-429; and, Rules 62-212.400, PSD - BACT Determination, and Rule 62-212.400(12), Source Obligation - escape-PSD, F.A.C.]
6. Applicable NSPS Provisions: The flares are subject to, and shall comply with, the applicable provisions in NSPS Subpart A (General Provisions) of 40 CFR 60, which are identified in Appendix A of this permit. [NSPS Subpart A in 40 CFR 60; and, Rule 62-204.800, F.A.C.]

#### OPERATIONAL REQUIREMENTS

7. Operation: The flares shall be operated with a flame present at all times, as determined by the methods specified in 40 CFR 60.18(f). [Rule 62-204.800(8)(d), F.A.C.; 40 CFR 60.18(c)(2); and, Rule 62-212.400, PSD - BACT Determination, F.A.C.]
8. Exit Velocity: The flares shall be operated with an exit velocity, in accordance with 40 CFR 60.18(c)(4) and (5), as determined by the methods specified in 40 CFR 60.18(f)(4) and (f)(6). [Rule 62-204.800(8)(d), F.A.C.; 40 CFR 60.18(c)(4) & (5); and, Rule 62-212.400, PSD - BACT Determination, F.A.C.]
9. Actual Exit Velocity: The owner or operator shall annually determine the actual exit velocity of each flare as determined by the methods specified in 40 CFR 60.18(f)(4) and (f)(6). [Rule 62-212.400, PSD - BACT Determination, F.A.C.]
10. Operation: Flares used to comply with provisions of 40 CFR 60, Subpart A shall be operated at all times when emissions may be vented to them. [Rule 62-204.800(8)(d), F.A.C.; 40 CFR 60.18(e); and, Rule 62-212.400, PSD - BACT Determination, F.A.C.]

#### EMISSION STANDARDS & LIMITATIONS

11. CO, VOC, NMOC, NO<sub>x</sub> & GHG Emissions: The permittee shall minimize CO, VOC, NMOC, NO<sub>x</sub> and GHG emissions by following the operational requirements of this permit. The operational requirements of this permit shall serve as a surrogate for CO, VOC, NMOC, NO<sub>x</sub> & GHG emissions. [Rule 62-212.400, PSD - BACT Determination, F.A.C.]
12. Particulate Matter (PM) - PM/PM<sub>10</sub>/PM<sub>2.5</sub>: The requirements stated in the previous specific condition 11. for CO, VOC, NMOC, NO<sub>x</sub> and GHG emissions also apply for PM emissions. The use of treated LFG also minimizes PM/PM<sub>10</sub>/PM<sub>2.5</sub> emissions. The LFG shall be treated to remove PM larger than 10 microns prior to combusting in the flares. The flares shall be operated with air assist to promote proper mixing and complete combustion of LFG and to reduce VE. VE shall serve as a surrogate for PM/PM<sub>10</sub>/PM<sub>2.5</sub> emissions. *{Permitting Note: Based on these work practice standards, the maximum PM/PM<sub>10</sub>/PM<sub>2.5</sub> emissions from each flare were estimated to be 1.6 lbs/hour and 6.9 tons/year.}* [Rule 62-212.400, PSD - BACT Determination, F.A.C.]
13. Visible Emissions (VE): The flares shall be operated with no visible emissions (VE), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [Rule 62-204.800(8)(d), F.A.C.; 40 CFR 60.18(c)(1); and, Rule 62-212.400, PSD - BACT Determination, F.A.C.]
29. Sulfur Dioxide (SO<sub>2</sub>) Emissions:
  - a. To ensure that PSD is avoided, SO<sub>2</sub> emissions shall not exceed 38.2 tons per consecutive 12 months from all 4 flares (combined). Compliance with this SO<sub>2</sub> emissions cap shall be demonstrated on a 12-month rolling basis using the following information: the sulfur level in the scrubbed LFG; the amount of LFG combusted by each flare; and, the assumption that all sulfur is converted to SO<sub>2</sub>.



### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### C. New Four (4) Open Candlestick Utility Flares (E.U. ID No. 007)

- b. SO<sub>2</sub> emissions from each flare shall not exceed 22.8 lbs/MMscf. *{Permitting Note: For each flare equivalent to 2.2 lbs/hour and 9.6 TPY.}*

[Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rules 62-4.160(2) and 62-212.400(12), *Source Obligation - escape-PSD*, F.A.C.]

14. Greenhouse Gases (GHG): The operational requirements of this permit minimize GHG emissions (being primarily N<sub>2</sub>O & CH<sub>4</sub>). The collection of the LFG and subsequent combustion in the flares also minimizes GHG emissions. NO<sub>x</sub> & CO emissions shall serve as primary surrogates for GHG emissions (being primarily N<sub>2</sub>O & CH<sub>4</sub>). [Rule 62-212.400, *PSD - BACT Determination*, F.A.C.]

#### COMPLIANCE DEMONSTRATION (TESTING) REQUIREMENTS

15. Compliance Tests - CO, VOC, NMOC, NO<sub>x</sub> & GHG: Since the operational requirements of this permit serve as a surrogate for CO, VOC, NMOC, NO<sub>x</sub> & GHG emissions CO, VOC, NMOC, NO<sub>x</sub> & GHG emissions testing is not required. Instead, demonstration of compliance with the CO, VOC, NMOC, NO<sub>x</sub> & GHG BACT standards of this permit is by the owner or operator's following the operational requirements of this permit. [Rules 62-212.400, *PSD - BACT Determination* and 62-297.310(7), F.A.C.]
16. Compliance Tests - PM/PM<sub>10</sub>/PM<sub>2.5</sub>: Since VE serves as a surrogate for PM/PM<sub>10</sub>/PM<sub>2.5</sub> emissions PM/PM<sub>10</sub>/PM<sub>2.5</sub> emissions testing is not required. Instead, demonstration of compliance with the PM/PM<sub>10</sub>/PM<sub>2.5</sub> BACT standards of this permit is through the VE testing. [Rules 62-212.400, *PSD - BACT Determination* and 62-297.310(7), F.A.C.]

#### TESTING REQUIREMENTS

17. Test Methods: Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
EPA Method 22	Visual Determination of Smoke Emissions from Flares

The above methods are described in Chapter 62-297, F.A.C. and/or 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. [Chapter 62-297, F.A.C. and Rule 62-204.800(9)(b)7., F.A.C.]

18. Visible Emission Test Method: EPA Method 22 shall be used to determine the compliance with the visible emission limit for the flares. The observation period is 2 hours and shall be used according to EPA Method 22. [Rule 62-204.800(8)(d), F.A.C.; and, 40 CFR 60.18(f)(1).]
19. Test Requirements: Tests shall be conducted in accordance with the applicable requirements specified in Appendix CTR (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9., F.A.C.]

#### MONITORING REQUIREMENTS

20. Operation & Maintenance (O&M) Plan: The permittee shall submit an O&M plan for the flares selected. [Application No. 0970079-011-AC/PSD-FL-429; Rules 62-4.070(1)&(3), *Reasonable Assurance*, 62-210.200, *Definitions - Potential to Emit (PTE)*, and 62-212.400, *PSD - BACT Determination*, F.A.C.]

#### RECORDKEEPING & REPORTING

21. Monthly Records: Within ten calendar days following each month, the permittee shall observe and record the following information in a written log or electronic format accessible to the Department: number of hours of operation of each flare; total monthly LFG flow rate to each flare; and total SO<sub>2</sub> emissions for the month and previous 12-month period, for a rolling 12-month total. Emissions of SO<sub>2</sub> shall be calculated from the monthly LFG consumption as well as the analytical results for the sulfur contents of the LFG representative of the given month of operation based on the semi-annual sampling for that period. [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rules 62-4.160(2) and 62-212.400(12), *Source Obligation - escape-PSD*, F.A.C.]



### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

---

#### C. New Four (4) Open Candlestick Utility Flares (E.U. ID No. 007)

22. Annual Reporting in AOR: The total SO<sub>2</sub> emissions from all flares (combined) shall be reported in the AOR, along with the total LFG consumption for all flares (combined). The sulfur content shall also be included with the AOR. [Application No. 0970079-011-AC/PSD-FL-429; Applicant Request; and, Rules 62-4.160(2) and 62-212.400(12), *Source Obligation - escape-PSD*, F.A.C.]
23. Annual Reporting in AOR: The permittee shall annually report the actual exit velocity of each flare. The actual exit velocity shall be reported to the Department as an attachment to the facility's AOR. [Rules 62-4.070(1)&(3), *Reasonable Assurance* and 62-4.160(2), F.A.C.]



**ATTACHMENT E**  
**COMPLIANCE PLAN AND REPORT**





1099 Miller Drive, Altamonte Springs, FL 32701

February 24, 2014

Mr. F. Thomas Lubozynski, P.E.  
Waste & Air Resource Programs Administrator  
Florida Department of Environmental Protection, Central District  
3319 Maguire Boulevard, Suite 232  
Orlando, Florida 32803-3767

Subject: 2013 Statement of Compliance – Title V Source  
J.E.D. Solid Waste Management Facility  
Omni Waste of Osceola County, LLC  
1501 Omni Way  
St. Cloud, Osceola County, Florida 34773  
Facility ID No. – 0970079

Dear Mr. Lubozynski:

Please find attached FDEP Form No. 62-213.900(7), Statement of Compliance – Title V Source, for the JED Solid Waste Management Facility. If you have any questions, please feel free to contact me at (904) 673-0446 or [mkaiser@wasteservicesinc.com](mailto:mkaiser@wasteservicesinc.com) at your earliest convenience.

Sincerely,

A handwritten signature in black ink that reads "Mike Kaiser". The signature is written in a cursive, flowing style.

Mike Kaiser  
Progressive Waste Solutions of FL, Inc.





# Department of Environmental Protection

## Division of Air Resource Management

### STATEMENT OF COMPLIANCE - TITLE V SOURCE

**REASON FOR SUBMISSION (Check one to indicate why this statement of compliance is being submitted)**

☒ Annual Requirement      ☐ Transfer of Permit      ☐ Permanent Facility Shutdown

REPORTING PERIOD*	REPORT DEADLINE**
January 1 <sup>st</sup> through December 31 <sup>st</sup> of 2013 (year)	March 1, 2014

\*The statement of compliance must cover all conditions that were in effect during the indicated reporting period, including any conditions that were added, deleted, or changed through permit revision.

\*\*See Rule 62-213.440(3)(a)2., F.A.C.

Facility Owner/Company Name: Omni Waste of Osceola County, LLC

Site Name: J.E.D. Solid Waste Management Facility Facility ID No. 0970079 County: Osceola

**COMPLIANCE STATEMENT (Check only one of the following three options)**

☐ A. This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, and there were no reportable incidents of deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above.

☒ B. This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part; however, there were one or more reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each incident of deviation, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.

☐ C. This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, EXCEPT those identified in the pages attached to this report and any reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each item of noncompliance, the following information is included:

1. Emissions unit identification number.
2. Specific permit condition number (note whether the permit condition has been added, deleted, or changed during certification period).
3. Description of the requirement of the permit condition.
4. Basis for the determination of noncompliance (for monitored parameters, indicate whether monitoring was continuous, i.e., recorded at least every 15 minutes, or intermittent).
5. Beginning and ending dates of periods of noncompliance.
6. Identification of the probable cause of noncompliance and description of corrective action or preventative measures implemented.
7. Dates of any reports previously submitted identifying this incident of noncompliance.

For each incident of deviation, as described in paragraph B. above, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.



## STATEMENT OF COMPLIANCE - TITLE V SOURCE

### RESPONSIBLE OFFICIAL CERTIFICATION

I, the undersigned, am a responsible official (Title V air permit application or responsible official notification form on file with the Department) of the Title V source for which this document is being submitted. With respect to all matters other than Acid Rain program requirements, I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.

Mike Kaiser  
(Signature of Title V Source Responsible Official)

2/24/14  
(Date)

Name: Mike Kaiser

Title: Region Engineer

### DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

I, the undersigned, am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

\_\_\_\_\_  
(Signature of Acid Rain Source Designated Representative)

\_\_\_\_\_  
(Date)

Name: \_\_\_\_\_

Title: \_\_\_\_\_

*{Note: Attachments, if required, are created by a responsible official or designated representative, as appropriate, and should consist of the information specified and any supporting records. Additional information may also be attached by a responsible official or designated representative when elaboration is required for clarity. This report is to be submitted to both the compliance authority (DEP district or local air program) and the U.S. Environmental Protection Agency (EPA) (U.S. EPA Region 4, Air and EPCRA Enforcement Branch, 61 Forsyth Street, Atlanta GA 30303).}*



**JED Solid Waste Management Facility**

**Facility ID# - 0970079**

**ATTACHMENT A**

**2013 Statement of Compliance**

During the 2013 calendar year there were deviations from permitted operating parameters. Each known deviation has been reported to the Florida Department of Environmental Protection (FDEP) in the semi-annual reports listed below:

- 2013 First NSPS Semi-Annual Report (January 1 – June 30, 2012), submitted July 29, 2013
- 2013 Second NSPS Semi-Annual Report (July 1- December 31, 2012), submitted January 30, 2014

Reported deviations were associated with the operating temperature and oxygen limits of gas extraction wells at the facility. As noted in the NSPS reports, the facility applied for and received alternate operating temperature limits and remediated oxygen levels for the affected wells.





**2893 Executive Park Drive, Suite 305, Weston, Florida 33331**

January 24, 2011

RE: Omni Waste of Osceola County, LLC

To Whom It May Concern:

This is to confirm that Michael Kaiser is an authorized signatory of Omni Waste of Osceola County, LLC (the "Corporation"), with authority to execute and deliver all documents and instruments required in connection with environmental matters for the Corporation, including without limitation, permit applications, modifications and financial assurances for permits issued to the Corporation.

**Omni Waste of Osceola County, LLC**

A handwritten signature in blue ink, appearing to read "Will P. Hulligan", is written over a horizontal line.

William P. Hulligan  
Manager

**Waste Services, Inc.**

A handwritten signature in blue ink, appearing to read "Will P. Hulligan", is written over a horizontal line.

William P. Hulligan  
Executive Vice President, U.S. Operations



**ATTACHMENT F**  
**REQUESTED CHANGES**



## **J.E.D. SOLID WASTE MANAGEMENT FACILITY**

### **ATTACHMENT F**

#### **REQUESTED CHANGES**

Omni is requesting two changes to the current Title V Permit (Air Permit No. 0970079-009-AV). The facility shutdown and removed the ASR Unit (EU004) from the JED Facility. Additionally, Omni notified FDEP of the shutdown on November 29, 2013. EU004 should be removed from the Title V Operating Permit.

The original Title V Permit only authorized waste disposal operations through Cell 10 (Solid Waste Phase III). Omni recently completed the permitting process to obtain Air Permit No. 0970079-011-AV/PSD-FL-429 which authorizes continued waste disposal operations from Cell 11 through Cell 23 (full permitted capacity) up to an estimated 81.5 million tons. Since waste acceptance operations are a continuing construction process and is completed only when the landfill reaches final capacity, ceases accepting waste, and is closed, Omni is requesting that EU005 be added to the Title V Operating Permit. No other changes to the Title V Operating Permit are being proposed within this renewal application.



**ATTACHMENT G**

**FUEL ANALYSIS OR SPECIFICATION**



## **J.E.D. SOLID WASTE MANAGEMENT FACILITY**

### **ATTACHMENT G**

#### **FUEL SPECIFICATIONS**

Waste landfill gas is the primary fuel burned by the flare. As demonstrated during the Initial Performance Test for the flare, the landfill gas burned was sampled and analyzed to determine the heat content. The results indicated an average heat content of approximately 567 Btu/cubic foot. Note that the methane content of landfill gas continuously varies and this value indicates a finite value during the initial performance testing. The flare is designed to handle a broad range of heat values.



## **ATTACHMENT H**

### **DETAILED DESCRIPTION OF CONTROL EQUIPMENT**



## ATTACHMENT H

### DETAILED DESCRIPTION OF CONTROL EQUIPMENT

The following information has been taken from the Equipment Specifications for the flare:

- ☐ One flare Model PCFT1454I12 and peripheral equipment (capacity 360-3,600 scfm of landfill gas at 30-50% methane content)
- ☐ Two Houston Service Industries blowers (each sized for 1,350-3,600 scfm of landfill gas at 55" w.c. vacuum and 15" w.c. discharge) with direct drive explosion proof motors
- ☐ Two 75 HP variable frequency drives
- ☐ One set of Associated Flex Couplings & manual valves
- ☐ One 12" Shand & Jurs Flame Arrestor
- ☐ One automatic propane pilot system
- ☐ One 14" pneumatic fail safe automatic header valve
- ☐ One 48" condensate knockout pot with 20 micron demister
- ☐ One thermal dispersion mass flow meter – (the facility owns three flow meters – 2 manufactured by Fluid Components International LLC and one from LANDTEC; only one calibrated until is utilized during operation, the rest are backup)
- ☐ One four channel Raco Guard-it Autodialer
- ☐ One Yokagawa six channel data logger/paperless chart recorder
- ☐ One control rack with: (NEMA 4 enclosure)
  - Blower control panel
  - Interconnecting piping, wiring, and gauges
  - Associated controls and wiring



## **ATTACHMENT I**

### **PROCEDURES FOR STARTUP AND SHUTDOWN (SSM PLAN)**



**Golder Associates Inc.**

9428 Baymeadows Road, Suite 400  
Jacksonville, FL USA 32256-7979  
Telephone (904) 363-3430  
Fax (904) 363-3445



**MUNICIPAL SOLID WASTE LANDFILL  
GAS COLLECTION AND CONTROL SYSTEM (GCCS)  
STARTUP, SHUTDOWN, AND MALFUNCTION PLAN  
J.E.D. SOLID WASTE MANAGEMENT FACILITY  
ST. CLOUD, OSCEOLA COUNTY, FLORIDA**

*Prepared for:*

*OMNI WASTE OF OSCEOLA COUNTY LLC.  
1501 OMNI WAY  
ST. CLOUD, FLORIDA 34773*

*Prepared by:*

*Golder Associates Inc.  
9428 Baymeadows Road, Suite 400  
Jacksonville, Florida 32256*

*Date of Issuance:*

*December 2008*

*Revision 0*

**DISTRIBUTION:**

3 Copies      Omni Waste of Osceola County LLC.  
2 Copies      Golder Associates Inc.

December 2008

083-82734.1



This startup, shutdown, and malfunction (SSM) plan (SSM Plan) was prepared by Golder Associates Inc. (Golder) in order to comply with the requirements of 40 CFR 63.6(e)(3), as this facility is subject to 40 CFR Part 63, Subpart AAAAA, the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Municipal Solid Waste (MSW) landfills. The SSM Plan contains all of the required elements set forth within 40 CFR 63.6(e).

This SSM Plan will be revised if the procedures described herein do not adequately address any malfunction or startup/shutdown events that occur at the facility. A copy of this plan and all revisions/addenda will be kept on file at the facility for at least five (5) years. Omni Waste of Osceola County LLC is responsible for assuring that the most recent copy of this SSM Plan is made available to all personnel involved with the landfill gas (LFG) collection and control system (GCCS) at the J.E.D. Solid Waste Management Facility as well as to appropriate regulatory agency personnel for inspection.



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Appendix B	SSM Reporting Forms
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## 1.0 REVISION HISTORY

Add the effective date of the most-recent revision to the list below. Do not overwrite or delete any dates. This is intended to be a complete record of all revisions made to this plan, and assists in making certain that all plan versions are retained for at least 5 years as required by §63.6(e)(3)(v).

Date of Initial Issuance
DECEMBER 8, 2008
Revision Dates



## **2.0 ABBREVIATION LIST**

The following is a list of abbreviations that are commonly used throughout this document.

GCCS	landfill gas collection and control system (the entire system, i.e., flare, blower, valves, piping, wells, and associated appurtenances)
HAP	hazardous air pollutants
NSPS	40 CFR 60, Subpart WWW – Standards of Performance for Municipal Solid Waste Landfills
NESHAP	40 CFR 63, Subpart AAAA – National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills
SSM	startup, shutdown, and malfunction
LFG	landfill gas
MSW	municipal solid waste
MACT	maximum achievable control technology
FDEP	Florida Department of Environmental Protection



### **3.0 INTRODUCTION**

#### **3.1 Purpose and Scope**

The municipal solid waste (MSW) landfill owner or operator of an affected source must develop and implement a written startup, shutdown, and malfunction (SSM) Plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; a program of corrective action for malfunctioning processes; and air pollution control and monitoring equipment used to comply with the relevant standard. The purpose of the SSM Plan is to:

- Ensure that, at all times, the MSW landfill owner or operator operates and maintains the affected source, including associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions to the levels required by the relevant standards;
- Ensure that the MSW landfill owner or operator is prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants (HAP); and
- Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

A more detailed summary of the regulatory background requirements for preparation and use of a SSM Plan are contained in 40 CFR Part 63 which provides guidance and instructions for completing and customizing the plan.

The management of the J.E.D. Solid Waste Management Facility (JED Facility) fully understands and acknowledges the SSM Plan requirements of the Maximum Achievable Control Technology (MACT) rule. This SSM Plan has been developed to specifically address these requirements as summarized above.

#### **3.2 Description of SSM Plan**

This SSM Plan explains the major elements related to startup, shutdown, and/or malfunction of a landfill gas (LFG) collection and control system (GCCS) at a MSW landfill. Startup and shutdown events are generally planned events associated with system repair, maintenance, testing, and upgrade, and may or may not be related to or occur in association with a malfunction



of the GCCS. A SSM event may include shutting down the flare/blower for routine maintenance. Upon completion of the maintenance, a startup event would follow. Malfunction events are distinct events when the GCCS is not operating in accordance with NSPS requirements and which result, or have the potential to result, in an exceedance of one or more emission limitations or operational standards under the NSPS.

### **3.3 Site Equipment Subject To This SSM Plan**

The following components of the GCCS are subject to this SSM Plan:

- Collection wells and other collectors
- Lateral and header extraction piping
- LFG mover equipment (blowers, valves, and piping at the flare station)
- Temperature monitoring and recording equipment
- Flow monitoring and recording equipment
- Control Device (flare)

Except as specifically excluded below, all components of the GCCS are to follow the SSM Plan.

The following items are excluded from this SSM Plan:

- Exceedances at individual wells for pressure, oxygen or nitrogen, and temperature.
- Surface emissions monitoring exceedances (reading at 500 ppm or greater above background).
- Portable and/or intermittent field monitoring equipment (i.e., GEM500/2000, FID).
- Shutdowns of the flare which are followed by successful re-start sequences. This is done automatically, and is part of the control device's normal operating procedures.
- Temporary (less than five days) closure of control valves within the landfill gas and collection system, in order to isolate portions of the system for troubleshooting or maintenance.
- Combustion devices utilizing "treated" landfill gas.



## 4.0 STARTUP/SHUTDOWN PLAN

This section details procedures for the startup and shutdown of the GCCS to ensure that, at all times, good safety and air pollution control practices are used for minimizing emissions to the levels required by the relevant standards.

### 4.1 How to Identify a GCCS Startup / Shutdown Event

The regulatory definition of “startup” reads as follows:

“Startup means the setting in operation of an affected source or portion of an affected source for any purpose.” (§63.2)

The regulatory definition of “shutdown” reads as follows:

“Shutdown means the cessation of operation of an affected source or portion of an affected source for any purpose.” (§63.2)

GCCS startup operations and shutdown events generally include startup or shutdown of gas mover equipment, LFG control devices, and any ancillary equipment that could affect the operation of the GCCS (e.g., power supply, air compressors, etc.). This section details procedures for the startup and/or shutdown of the GCCS to ensure that, at all times, good safety and air pollution control practices are used for minimizing emissions to the levels required by the relevant standards.

The following **partial** list includes events that may necessitate a shutdown of the GCCS at the JED FACILITY.



**TABLE 4-1**

**Potential Events Necessitating Shutdown of the GCCS**

Control Device Maintenance, Repair, or Cleaning
Addition of New GCCS Components
Extraction Well Raising
Movement of LFG Piping to Accommodate New Components or Filling Operations
Source Testing
Gas Mover Equipment Maintenance, Repair, or Cleaning
Gas Processing Equipment Maintenance, Repair, or Cleaning
Ancillary Equipment (e.g., compressors, etc.) Maintenance, Repair, or Cleaning
New Equipment Testing and Debugging
Shutdown and Subsequent Startup to Address Malfunctions
Planned Electrical Outages
Severe Weather/Hurricanes

**4.2 Actions to Take When the GCCS is Started-Up**

The following provides a summary of typical response actions for startup of the GCCS.

**4.2.1 Gas Mover and Collection System**

The following activities may have the potential to emit regulated air pollutants to the atmosphere during startup of the collection system portion of GCCS: (1) purging of gases trapped within piping system prior to normal operation; (2) repair of system leaks discovered during startup, and (3) all other activities after construction of the system but prior to fulltime operation, which could release HAP from the collection system. These activities would be subject to the Startup Plan portion of the SSM Plan.

During such activities, work shall progress such that air emissions are minimized to the greatest extent possible by:

- Temporarily capping pipes venting gas if such capping does not impact safety or the effective construction of the system.
- Minimizing surface area allowing gas to emit to the atmosphere to the extent that it does not impact safety or the effective construction of the system.



- Ensuring that other parts of the system, not impacted by the activity, are operating in accordance with the applicable requirements of NSPS.
- Limiting the purging of piping to as short duration as possible to ensure safe combustion of the gas in the control device.

GCCSs, once installed, are “closed” systems designed to prevent the uncontrolled release of LFG to the atmosphere. The network of piping installed at the site connects each extraction point with the control device(s) with no open vents located anywhere in the collection system.

Portions of collection systems or individual extraction points may be isolated by valves installed in the system from time to time and subsequently opened. Opening these valves shall not be considered a startup, unless such an activity causes the venting of gas to the atmosphere. If the activity results in emissions to the atmosphere, the actions listed above shall be followed.

The operation of the collection system, once installed, shall be consistent with the provisions of NSPS as well as the GCCS Design Plan, which has been developed and approved for the facility.

#### **4.2.2 Control Device(s)**

Personnel shall follow the recordkeeping procedures as identified below when starting the respective control devices. Control devices operating at MSW landfills normally undergo planned startups. However, flare systems are designed for unattended operation. Automatic startups are described in the standard operating procedures found in the GCCS operation and maintenance plan and the flare station user manual incorporated, by reference, as part of this SSM Plan. Control device startup procedures can be located in operations manuals, this plan, and Appendix B as listed in Table 4.2.

**TABLE 4-2**  
**Startup/Shutdown Guidance Procedure Reference**

Device Name	Operations Manual, Notes, Report, etc.	
	Title	Page(s)
Flare Station	User Manual Number 2120 – LFG Specialties	2 binders
GCCS	GCCS Operation and Maintenance Plan – Geosyntec	38 pages and appendices



### **4.3 Actions to Take When the GCCS Is Shutdown**

#### **4.3.1 Collection System**

GCCSs, once installed, are “closed” systems designed to prevent the uncontrolled release of LFG to the atmosphere. The network of piping installed at the site connects each extraction point with the control device(s) with no open vents located anywhere in the collection system.

Portions of collection systems or individual extraction points may be isolated by valves installed in the system from time to time. Closing these valves shall not be considered a shutdown, unless such an activity causes an exceedance of the provisions of NSPS and/or any subsequent approvals of alternatives in the facility’s GCCS Design Plan or approved variances issued thereafter. If a shutdown occurs, notify the appropriate party listed in Section 5.13.

#### **4.3.2 Control Device(s)**

Personnel shall follow the recordkeeping procedures as identified in Appendix B when shutting down the respective control devices. Control devices operating at the JED Facility normally undergo planned shutdown for the various events listed in Table 4-1. Shutdowns for equipment malfunction or breakdown should be addressed in the malfunction plan. Control device shutdown guidance procedures can be located in operations manuals and Appendix B as listed in Table 4.2.

### **4.4 What to Record for All Startup/Shutdown Events**

The operator shall record the following information on the attached **SSM Report Form** (Appendix B):

- The date and time the startup/shutdown occurred.
- The duration of the startup/shutdown.
- The actions taken to affect the startup/shutdown.
- Whether procedures in this SSM Plan were followed. If the procedures in the SSM Plan were not followed, a **SSM Plan Departure Report Form** (Appendix B) must also be completed.
- If an applicable emission limitation was exceeded, a description of the emission standard that was exceeded.



#### 4.5 Whom to Notify at the Facility in Case of a Startup/Shutdown Event

- The GCCS operator or the Site/Facility Manager should be notified immediately of the startup/shutdown.
- The GCCS operator or Site/Facility Manager should be notified within a reasonable timeframe of progress of the diagnosis and resolution of the startup/shutdown.
- The GCCS operator and Environmental Manager should be notified when the alternative timeframe for startup/shutdown has been established if it is outside of the timeframes currently allowed by the NSPS for particular compliance elements.

The **SSM Report Form** should be initially prepared upon startup/shutdown, or discovery of an automatic startup/shutdown, and implementation of the SSM Plan. The form should be finalized by the GCCS operator upon successful implementation of the SSM Plan and submitted to the Environmental Manager. The original form should be retained in the landfill files for five (5) years.

#### 4.6 What to Report for a Startup/Shutdown Event

If the actions taken during the startup/shutdown **were consistent** with this SSM Plan and no excessive emissions occurred, file the necessary information in your semi-annual SSM report (*within 30 days following the end of each 6-month period*) or appropriate semi-annual compliance report with the following information:

1. Name and title of Site/Facility Manager or Other appropriate Facility Personnel;
2. Certifying signature of the owner/operator or other responsible person such as the GCCS operator;
3. Statement that the actions taken during the startup or shutdown were consistent with the SSM Plan; and
4. A copy of the **SSM Report Form**.

If the actions taken during a startup/shutdown **were not consistent** with this SSM Plan and/or excessive omissions occurred, the Environmental Manager must report the actions taken to the enforcing authority by telephone or facsimile transmission within two (2) working days after the startup or shutdown. A letter must then be sent to the enforcing authority within seven (7)



working days after the startup or shutdown. The letter should be sent by certified or registered mail or overnight delivery service, and must include the following information:

1. Name and title of Site/Facility or Other appropriate Facility Personnel;
2. Certifying signature of the owner/operator or other responsible person;
3. A copy of the **SSM Report Form**;
4. Detailed explanation of the circumstances of the start/shutdown;
5. The reasons the SSM Plan was not adequate; and whether any excess emissions and/or parameter monitoring exceedances is believed to have occurred during the event.
6. A copy of the **SSM Plan Departure Report Form**.

Note: If the revisions to the SSM Plan alter the scope of the process activities at JED Facility or otherwise modify the applicability of any emission limit, work practice requirement, or other requirement in the MACT rule and/or the NSPS, the revised SSM Plan is not effective until written notice has been provided to the permitting authority describing the SSM Plan revision(s).



## 5.0 MALFUNCTION PLAN

### 5.1 How to Identify a GCCS Malfunction

The regulatory definition of “malfunction” reads as follows:

**“Malfunction** means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.” (§63.2, revised 5/16/07)

The following **partial** list (Table 5-1) includes common malfunction events that may constitute a malfunction of the GCCS at the JED Facility. The cause of these events should be investigated immediately in order to determine the best course of action to correct the malfunction. Each of these malfunctions could have multiple causes that need to be evaluated and possibly considered. The intent of this SSM Plan is to include all possible causes for the specific malfunction events.

**Table 5-1**  
**Potential Malfunction Events**

Possible Malfunction	Section
Loss of LFG Flow/Gas Mover Malfunction	5.3
Loss of Electrical Power	5.4
Low Temperature Conditions at Control Device	5.5
Loss of Flame at the Control Device	5.6
Malfunction of Flow Measuring/Recording Device	5.7
Malfunction of Temperature Measuring/Recording Device	5.8
Collection Well and Pipe Failures	5.9
Other Control Device Malfunctions	5.10
Malfunctions of Field Monitoring Equipment	5.11



For one of these occurrences to be considered a malfunction that is required to be addressed by this SSM Plan, it must result in, or have the potential to result in, an exceedance of one or more of the NSPS operational and compliance requirements or the provisions of the MACT rule (e.g., exceedance, reading outside of required operational range, etc). The following list constitutes the possible exceedances of the New Source Performance Standards (NSPS) for MSW landfills that could occur due to a malfunction of GCCS, thereby necessitating implementation of this SSM Plan:

**TABLE 5-2**

**Potential Emission Limitation Exceedances Caused by Malfunction Events**

GCCS downtime of greater than five days (if alternative timeframe has not been established)
Free venting of collected LFG without control for greater than one hour
Control device temperatures excursions in which 3-hour block average is less than established minimum temperature (enclosed combustors only)
Downtime for temperature monitoring and/or recording equipment of greater than 15 minutes (if alternative timeframe has not been established)
Any downtime for LFG flow monitoring and/or recording equipment (if alternative timeframe has not been established)

If the occurrence does not result in an exceedance of an applicable emission limitation, or does not have the potential to result in such an exceedance, then it is not required to be corrected in accordance with this SSM Plan. However, this plan should be followed for all malfunction events in order to avoid confusion and possible non-compliance. Malfunctions should be considered actionable under this SSM Plan whether discovered by the JED FACILITY owner or operator during normal operations or by a regulatory agency during compliance inspections.

The operator should follow all the corrective action, notification, record keeping, and reporting procedures described herein in case of malfunction of the GCCS.

## **5.2 Actions to Take When the GCCS Malfunctions—All Malfunctions**

- Determine whether the malfunction has caused an exceedance, or has the potential to cause an exceedance, of any applicable emission limitation contained in the NSPS or MACT.



- Identify whether the malfunction is causing or has caused excess emissions to the atmosphere. If excess emissions are occurring, take necessary steps to reduce emissions to the maximum extent possible using good air pollution control practices and safety procedures.
- Contact the site GCCS operator immediately and proceed with the malfunction diagnosis and correction procedures described in Appendix A (“Common Causes and Response Actions for GCCS Malfunctions”) for each specific malfunction.
- Site-specific malfunction and/or troubleshooting procedures are contained in the documents referenced in Table 4.2. Personnel shall follow these guidance procedures when addressing a malfunction of a collection system or control device.
- If the procedures in this SSM Plan do not address or adequately address the malfunction that has occurred, the operator should attempt to correct the malfunction with the best resources available. The GCCS operator and Environmental Manager should be notified of this situation immediately. Complete a **SSM Plan Departure Report Form** (Appendix B) as discussed in Section 5.14. The SSM Plan must be updated to better address this type of malfunction within 45 days of the event.
- Notify the GCCS operator and Environmental Manager of the progress of the diagnosis and correction procedures and status of the malfunction as soon as practicable.
- If the GCCS malfunction cannot be corrected within the time frame specified in the NSPS, notify the Environmental Manager and proceed to shutdown the control device and/or the process(es) venting to the control device, if this has not already occurred automatically.
- If the GCCS malfunction cannot be corrected within the time frame allowed by the NSPS rule for each specific malfunction, define the appropriate alternative timeframe for corrective action that is reasonable for the type of repair or maintenance that is required to correct the malfunction.
- If the GCCS malfunction cannot be corrected within alternative timeframe for corrective action specified above, notify the Environmental Manager and conduct the appropriate record keeping and reporting required for deviations of the MACT rule and Title V permit.
- Once the malfunction is corrected, notify the Site/Facility Manager and the Environmental Manager as soon as the system is operational.
- Complete the **SSM Report Form** (Appendix B) after the malfunction diagnosis and correction procedures are completed.
- If the procedures in this SSM Plan do not address or adequately address the malfunction that has occurred, the operator should note the circumstances and the actual steps taken to correct the malfunction in the **SSM Report Form** (Appendix B). This SSM Plan will need to be revised based on this information, as described in Section 5.14 below.



- Follow procedures in Sections 5.12 through 5.14, as appropriate, to adequately document, notify, and report the malfunction and corrective action.

### **5.3 Loss of LFG Flow/Gas Mover Malfunction**

- Follow the procedures in Section 5.2, above: **What to Do When the GCCS Malfunctions—All Malfunctions.**
- Check to see if the control device has shutdown. If control device has shutdown, make sure that gas mover equipment has shutdown to prevent free venting of LFG. Attempt to restart control device to determine if system will remain operational.
- Conduct diagnostic procedures to identify the cause of the malfunction. Potential causes and response actions for this type of malfunction are listed in Appendix A.
- If the malfunction cannot be corrected within five days, follow the procedures under Section 5.2 above to establish an appropriate alternative timeframe for corrective action and complete necessary record keeping and reporting if the malfunction cannot be corrected within the established timeframe.

### **5.4 Loss of Electrical Power**

- Follow also the procedures in Section 5.2, above: **What to Do When the GCCS Malfunctions—All Malfunctions.**
- Conduct diagnostic procedures to identify the cause of the malfunction. Potential causes and response actions for this type of malfunction are listed in Appendix A.
- If the malfunction cannot be corrected within the time frame allowed by the NSPS rule, follow the procedures under Section 5.2 above to establish an appropriate alternative timeframe for corrective action and complete necessary record keeping and reporting if malfunction cannot be corrected within the established timeframe.

### **5.5 Low Temperature Conditions at the Control Device**

- Follow also the procedures in Section 5.2, above: **What to Do When the GCCS Malfunctions—All Malfunctions.**
- Check to see if the control device has shutdown. If control device has shutdown, make sure that gas mover equipment has shutdown to prevent free venting of LFG. Attempt to restart control device to determine if system will remain operational.



- Conduct diagnostic procedures to identify the cause of the malfunction. Potential causes and response actions for this type of malfunction are listed in Appendix A.
- If the malfunction causes an exceedance of the control device's minimum temperature for a 3-hour block average, follow the procedures under Section 5.2 above to establish an appropriate alternative timeframe for corrective action and complete necessary record keeping and reporting if the malfunction cannot be corrected within the established timeframe.
- If the malfunction causes the GCCS to go off-line and cannot be corrected within the time frame allowed by the NSPS regulations, follow the procedures under Section 5.2 above to establish an appropriate alternative timeframe for corrective action and complete necessary record keeping and reporting if the malfunction cannot be corrected within the established timeframe.

## 5.6 Loss of Flame at the Control Device

- Follow also the procedures in Section 5.2, above: **What to Do When the GCCS Malfunctions—All Malfunctions.**
- Check to see if the control device has shutdown. If control device has shutdown, make sure that gas mover equipment has shutdown to prevent free venting of LFG. Attempt to restart control device to determine if system will remain operational.
- If system will not restart, follow also the procedures in Section 5.3, above: **Loss of LFG Flow.**
- Conduct diagnostic procedures to identify the cause of the malfunction. Potential causes and response actions for this type of malfunction are listed in Appendix A.
- If the malfunction cannot be corrected within the time frame allowed by the NSPS regulations, follow the procedures under Section 5.2 above to establish an appropriate alternative timeframe for corrective action and complete necessary record keeping and reporting if the malfunction cannot be corrected within the established timeframe.

## 5.7 Malfunctions of Flow Monitoring/Recording Device

- Follow the procedures in Section 5.2, above: **What to Do When the GCCS Malfunctions—All Malfunctions.**
- Conduct diagnostic procedures to identify the cause of the malfunction. Potential causes and response actions for this type of malfunction are listed in Appendix A.



- If the malfunction cannot be corrected in the time frame allowed by the NSPS regulations, follow the procedures under Section 5.2 above to establish an appropriate alternative timeframe for corrective action and complete necessary record keeping and reporting if the malfunction cannot be corrected within the established timeframe.

## 5.8 Malfunctions of Temperature Monitoring/Recording Device

- Follow the procedures in Section 5.2, above: **What to Do When the GCCS Malfunctions—All Malfunctions.**
- Conduct diagnostic procedures to identify the cause of the malfunction. Potential causes and response actions for this type of malfunction are listed in Appendix A.
- If the malfunction cannot be corrected within 15 minutes, follow the procedures under Section 5.2 above to establish an appropriate alternative timeframe for corrective action and complete necessary record keeping and reporting if the malfunction cannot be corrected within the established timeframe.

## 5.9 Collection Well and Pipe Failures

- Follow the procedures in Section 5.2, above: **What to Do When the GCCS Malfunctions—All Malfunctions.**
- Follow also the procedures in Section 5.3, above: **Loss of Flow/Gas Mover Malfunction.**
- Conduct diagnostic procedures to identify the cause of the malfunction. Potential causes and response actions for this type of malfunction are listed in Appendix A.
- If the malfunction causes the entire GCCS to go off-line and cannot be corrected within 5 days, follow the procedures under Section 5.2 above to establish an appropriate alternative timeframe for corrective action and complete necessary record keeping and reporting if the malfunction cannot be corrected within the established timeframe.

## 5.10 Other Control Device Malfunctions

- Follow also the procedures in Section 5.2, above: **What to Do When the GCCS Malfunctions—All Malfunctions.**
- Check to see if the control device has shutdown. If control device has shutdown, make sure that gas mover equipment has shutdown to prevent free venting of LFG. Attempt to restart control device to determine if system will remain operational.



- Conduct diagnostic procedures to identify the cause of the malfunction. Potential causes and response actions for this type of malfunction are listed in Appendix A.
- If the malfunction causes an exceedance of the control device's minimum temperature for a 3-hour block average, follow the procedures under Section 5.2 above to establish an appropriate alternative timeframe for corrective action and complete necessary record keeping and reporting if the malfunction cannot be corrected within the established timeframe.
- If the malfunction causes the entire GCCS to go off-line and cannot be corrected within 5 days, follow the procedures under Section 5.2 above to establish an appropriate alternative timeframe for corrective action and complete necessary record keeping and reporting if the malfunction cannot be corrected within the established timeframe.

### 5.11 What to Record for a Malfunction

The operator must record the following information on the attached **SSM Report Form**:

- The date and time the malfunction occurred.
- The duration of the malfunction.
- A description of the affected equipment.
- The cause or reason for the malfunction (if known).
- The actions taken to correct the malfunction (checklist).
- Whether the procedures in this SSM Plan were followed. If the procedures in the plan were not followed, a **SSM Plan Departure Report Form** must also be completed.
- A description of the emission standard that was exceeded or had the potential to be exceeded.

### 5.12 Whom to Notify at the Facility in Case of a Malfunction

The following people should be contacted (in order of priority) for any events requiring the implementation of the SSM plan.

Title/Position	Name	Cell Phone	Other Phone
GCCS Operator	Keith Lunsford	407-791-5042	407-891-3720 x222
Site Manager	Matt Orr		407-891-3720
Env. Manager	Mike Kaiser	904-673-0446	N/A



The following numbers are provided in the event additional resources are necessary to address the malfunction or an immediate notification is required to be made to FDEP. Note that immediate notification (within 2 working days) is required when deviating from SSM Plan and an emission standard/limit was exceeded (or believed to have been exceeded).

Florida DEP	Central District	Air Program	407-893-3333
Flare Manufacturer	LFG Specialties	Lee Zink	419-425-6190
Blower	LFG Specialties	Louis Kalani	419-425-6235
Landfill Gas Consultant	Golder Associates Inc.	Don Grigg	904-363-3430

The **SSM Report Form** shall be initially prepared upon discovery of the malfunction and implementation of the SSM Plan. The form shall be finalized by the GCCS operator on duty upon successful implementation of the SSM Plan and submitted to the Environmental Manager. The original form must be retained in the landfill files for five (5) years.

### 5.13 What to Report for a Malfunction Event

- If the actions taken during the malfunction **were consistent** with this SSM Plan, and the malfunction resulted or had the potential to result in an exceedance of an applicable emission standard, file the necessary information with the FDEP with the following information included:
  1. Name and title of GCCS operator and the Environmental Manager;
  2. Certifying signature of the owner/operator or other responsible person.
  3. Statement that the actions taken during the malfunction were consistent with the SSM Plan; and
  4. A copy of the **SSM Report Form**.
- If the actions taken during a malfunction **were not consistent** with this SSM Plan, and the malfunction resulted in or had the potential to result in an exceedance of an applicable emission standard, (see items listed under Step 1 above), the Environmental Manager must report the actions taken to the FDEP by telephone or facsimile (FAX) transmission within two (2) working days after commencing the actions that were inconsistent with the plan. A letter must then be sent to the FDEP within seven (7) working days after the malfunction. The letter should be sent by certified or registered mail or overnight delivery service, and must include the following information:



1. Name and title of appropriate Facility Personnel;
  2. Certifying signature of the owner/operator or other responsible person
  3. A copy of the **SSM Report Form**;
  4. Detailed explanation of the circumstances of the malfunction;
  5. The reasons the SSM Plan was not adequate;
  6. Whether any excess emissions and/or parameter monitoring exceedances is believed to have occurred during the event; and
  7. Prepare and include SSM Plan **Deviation Report Form**.
- If the actions taken during the malfunction **were not consistent** with this SSM Plan, the facility must:
    1. Revise the SSM Plan, within 45 days, after the malfunction to include procedures for operating and maintaining the GCCS during similar malfunction events.
    2. Provide a written notice to the FDEP describing the revision.



## **6.0 RECORDKEEPING AND REPORTING REQUIREMENTS SUMMARY**

### **6.1 SSM Plan Requirements**

The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of:

- The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);
- The occurrence and duration of each malfunction of the required air pollution control and monitoring equipment;
- All required maintenance performed on the air pollution control and monitoring equipment;
- Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan;
- All information necessary to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see 40 CFR §63.3(e)(3)) when all actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. This information may be recorded using a "checklist", or some other effective form of recordkeeping; and
- Each period during which a continuous monitoring system is malfunctioning or inoperative.

### **6.2 Reporting Deviations from the SSM Plan**

#### **6.2.1 Immediate Report (Within Two Working Days)**

Any time an action taken during a SSM event is not consistent with the procedures specified herein, and the source exceeds an emission limitation, the facility must make a record of the actions taken and report the actions taken for that event within two (2) working days after commencing actions inconsistent with the plan. The immediate report may consist of a telephone call or facsimile transmission to the agency.



### **6.2.2 Follow-Up Report**

In accordance with 40 CFR §63.10(d)(5), the immediate report must be followed up by a letter within seven (7) working days after the end of the event that contains the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy. The letter shall explain the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred. In addition, the SSM plan shall be revised within 45 days of the non-conforming event.

### **6.3 SSM Plan Revisions**

Facilities must maintain at the affected source a current SSM plan and must make the plan available upon request. In an SSM plan is subsequently revised, the facility must maintain each previous version of the SSM plan, for a period of 5 years after revision of the plan. Each such revision must be reported in the semi-annual report. Facilities must retain a copy of the most recent plan for 5 years from the date a source ceases operation or is no longer subject to this part.

If the SSM plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the SSM plan at the time the owner or operator developed the plan, the owner or operator must revise the SSM plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment.

In the event that the owner or operator makes any revision to the SSM plan which alters the scope of the activities at the source which are deemed to be an SSM, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.

Although the SSM plan will be required as a part of the Title V permit, any revisions made to the SSM plan shall not be deemed to constitute a permit revision.



## **6.4 Semi-Annual Reporting**

If all actions are consistent with the procedures specified in the SSM plan, the owner or operator shall state such information in a semi-annual startup, shutdown, and malfunction report.

Semi-annual reports shall only be required if an SSM event occurred during the reporting period, and must include the number, duration, and a brief description of each startup, shutdown, or malfunction event. The report shall consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy that shall be submitted to the administrator semi-annually. The report shall be delivered or postmarked by the 30<sup>th</sup> day following the end of each reporting period, July 30 and January 30. If excess emissions and continuous monitoring system performance reports are required, the SSM reports may be submitted simultaneously.

If the SSM plan was revised during the reporting period, to reflect changes in equipment or procedures at the affected source, this must also be reported in the semi-annual report.



## **APPENDIX A**

### **Common Causes and Response Actions for GCCS Malfunctions**

Appendix A represents a summary of possible causes and response actions for GCCS malfunctions. The list is not considered to be exhaustive.



EQUIPMENT	PURPOSE	MALFUNCTION EVENT	COMMON CAUSES	TYPICAL RESPONSE ACTIONS
<b>LFG Collection and Control System</b>				
Blower or Other Gas Mover Equipment	Applies vacuum to wellfield to extract LFG and transport to control device	Loss of LFG Flow/Blower Malfunction	<ul style="list-style-type: none"> <li>-Flame arrestor fouling/deterioration</li> <li>-Automatic valve problems</li> <li>-Blower failure (e.g., belt, motor, impeller, coupling, seizing, etc.)</li> <li>-Loss of power</li> <li>-Extraction piping failure</li> <li>-Condensate knock-out problems</li> <li>-Extraction piping blockages</li> </ul>	<ul style="list-style-type: none"> <li>-Repair breakages in extraction piping</li> <li>-Clean flame arrestor</li> <li>-Repair blockages in extraction piping</li> <li>-Verify automatic valve operation, compressed air/nitrogen supply</li> <li>-Notify power utility, if appropriate</li> <li>-Provide/utilize auxiliary power source, if necessary</li> <li>-Repair Settlement in Collection Piping</li> <li>- Repair Blower</li> <li>-Activate back-up blower, if available</li> <li>-Clean knock-out pot/demister</li> <li>-Drain knock-out pot</li> </ul>
Extraction Wells and Collection Piping	Conduits for extractions and movement of LFG flow	Collection well and pipe failures	<ul style="list-style-type: none"> <li>-Break/crack in header or lateral piping</li> <li>-Leaks at wellheads, valves, flanges, Test ports, seals, couplings, etc.</li> <li>-Collection piping blockages</li> <li>-Problems due to settlement (e.g. pipe separation, deformation, development of low points)</li> </ul>	<ul style="list-style-type: none"> <li>-Repair leaks or breaks in lines or wellheads</li> <li>-Follow procedures for loss of LFG flow/blower malfunction</li> <li>-Repair blockages in collection piping</li> <li>-Repair settlement in collection piping</li> <li>-Re-install, repair, or replace piping</li> </ul>
Blower or Other Gas Mover Equipment And Control Device	Collection and control of LFG	Loss of electrical power	<ul style="list-style-type: none"> <li>- Force majeure/Act of God (e.g., lightning, flood, earthquake, etc.)</li> <li>-Area-wide or local blackout or brown-out</li> <li>-Interruption in service (e.g. blown service fuse)</li> <li>-Electrical line failure</li> <li>-Breaker trip</li> <li>-Transformer failure</li> <li>-Motor starter failure/trip</li> <li>-Overdraw of power</li> <li>-Problems in electrical panel</li> <li>-Damage to electrical equipment from on-site operations</li> </ul>	<ul style="list-style-type: none"> <li>-Check/reset breaker</li> <li>-Check/repair electrical panel components</li> <li>-Check/repair transformer</li> <li>-Check/repair motor starter</li> <li>-Check/repair electrical line</li> <li>-Test amperage to various equipment</li> <li>-Contact electricity supplier</li> <li>-Contact/contract electrician</li> <li>-Provide auxiliary power (if necessary)</li> </ul>



EQUIPMENT	PURPOSE	MALFUNCTION EVENT	COMMON CAUSES	TYPICAL RESPONSE ACTIONS
<b>LFG Collection and Control System</b>				
LFG Control Device	Combusts LFG	Low temperature conditions at control device	<ul style="list-style-type: none"> <li>-Problems with temperature - monitoring equipment</li> <li>-Problems/failure of -thermocouple and/or thermocouple wiring</li> <li>-Change of LFG flow</li> <li>-Change of LFG quality</li> <li>-Problems with air louvers</li> <li>-Problems with air/fuel controls</li> <li>-Change in atmospheric conditions</li> </ul>	<ul style="list-style-type: none"> <li>-Check/repair temperature monitoring equipment</li> <li>-Check/repair thermocouple and/or wiring</li> <li>-Follow procedures for loss of flow/blower malfunction</li> <li>-Check/adjust louvers</li> <li>-Check/adjust air/fuel controls</li> <li>-Check/adjust LFG collectors</li> </ul>
LFG Control Device	Combusts LFG	Loss of Flame	<ul style="list-style-type: none"> <li>-Problems/failure of thermocouple</li> <li>-Loss/change of LFG flow</li> <li>-Loss/change of LFG quality</li> <li>-Problems with air/fuel controls</li> <li>-Problems/failure of flame sensor</li> <li>-Problems with temperature monitoring equipment</li> </ul>	<ul style="list-style-type: none"> <li>-Check/repair temperature monitoring equipment</li> <li>-Check/repair thermocouple</li> <li>-Follow procedures for loss of flow/blower malfunction</li> <li>-Check/adjust air/fuel controls</li> <li>-Check/adjust/repair flame sensor</li> <li>-Check/adjust LFG collectors</li> </ul>
Flow Monitoring/Recording Device	Measures and records gas flow from collection system to control	Malfunctions of Flow Monitoring/Recording Device	<ul style="list-style-type: none"> <li>-Problems with orifice plate, pitot tube, or other in-line flow measuring device</li> <li>-Problems with device controls and/or wiring</li> <li>-Problems with chart recorder</li> </ul>	<ul style="list-style-type: none"> <li>-Check/adjust/repair flow measuring device and/or wiring</li> <li>-Check/repair chart recorder</li> <li>-Replace paper in chart recorder</li> </ul>
Temperature Monitoring/Recording Device	Monitors and records combustion temperature of enclosed combustion device	Malfunctions of Temperature Monitoring/Recording Device	<ul style="list-style-type: none"> <li>-Problems with thermocouple</li> <li>-Problems with device controls and/or wiring</li> <li>-Problems with chart recorder</li> </ul>	<ul style="list-style-type: none"> <li>-Check/adjust/repair thermocouple</li> <li>-Check/adjust/repair controller and/or wiring</li> <li>-Check/adjust/repair electrical panel components</li> <li>-Check/repair chart recorder</li> <li>-Replace paper in chart recorder</li> </ul>



EQUIPMENT	PURPOSE	MALFUNCTION EVENT	COMMON CAUSES	TYPICAL RESPONSE ACTIONS
<b>LFG Collection and Control System</b>				
Control Device	Combusts LFG	Other Control Device Malfunctions	<ul style="list-style-type: none"> <li>-Control device smoking (i.e. visible emissions)</li> <li>-Problems with flare insulation</li> <li>-Problems with pilot light system</li> <li>-Problems with air louvers</li> <li>-Problems with air/fuel controllers</li> <li>-Problems with thermocouple</li> <li>-Problems with burners</li> <li>-Problems with flame arrester</li> <li>-Alarmed malfunction conditions not covered above</li> <li>-Unalarmed conditions discovered during inspection not covered above</li> </ul>	<ul style="list-style-type: none"> <li>-Site-specific diagnosis procedures</li> <li>-Site-specific responses actions based on diagnosis</li> <li>-Open manual louvers</li> <li>-Clean pitot orifice</li> <li>-Clean/drain flame arrester</li> <li>-Refill propane supply</li> <li>-Check/repair pilot sparking system</li> </ul>



## **APPENDIX B**

### **SSM Plan Reporting Forms**



## Startup/Shutdown/Malfunction Report Form

## Section 1 - All Events

Type of Event	Military Time		Duration (hours)	Event Code (see attached)	SOP* Followed?	
	Date/Time Start	Date/Time End			Yes	No**
<input type="checkbox"/> Startup						
<input type="checkbox"/> Shutdown						
<input type="checkbox"/> Malfunction					Complete Section 2 Below	

Date Form Filled Out: \_\_\_\_\_ Signature: \_\_\_\_\_

\* Standard Operating Procedure (SOP) for Flare Startups and Shutdowns are provided in SSM Plan and Flare Station User Manual

\*\*If SOP in SSM Plan was not followed, notify facility manager immediately.

## Section 2 - Malfunction Events Only

Corrective Action Procedures for All Malfunctions		<input checked="" type="checkbox"/> Check one of the following for each step:	
Step		Procedure completed	Procedure Not Applicable
1.	Determine if landfill gas is being released to the air (can you smell landfill gas, or measure/detect gas flow?).	<input type="checkbox"/>	
2.	If landfill gas is being released to the air, notify personnel on "Contact List", Plan Section 5.13.	<input type="checkbox"/>	<input type="checkbox"/>
3.	Determine if the malfunction is causing an unsafe operating condition (air entering landfill or piping, smoking, vibration, or other problem), which may harm people, the environment or the landfill gas control equipment.	<input type="checkbox"/>	
4.	If unsafe operating condition exists, or landfill gas is being released to the air stop landfill gas flow (if possible)	<input type="checkbox"/>	<input type="checkbox"/>
5.	If Control device or other system component is shutdown due to Step 4, follow Shutdown SOP and Complete Section 1 - "Shutdown".	<input type="checkbox"/>	<input type="checkbox"/>
6.	Determine if other personnel/resource (qualified technician, electrician, consultant or other) are needed for malfunction diagnosis.	<input type="checkbox"/>	
7.	If additional personnel needed, notify qualified personnel: a. Record contact name, date and time: _____ b. Contact site representative with information recorded in #7.a.	<input type="checkbox"/>	<input type="checkbox"/>
8.	Start malfunction diagnosis.	<input type="checkbox"/>	
9.	Determine if other resources are needed to fix the malfunction (qualified technician, electrician, contractor, on-site resources, manufacturer's representative, or other).	<input type="checkbox"/>	
10.	If additional resources needed, contact qualified resource: a. Record contact name, date and time: _____ b. Contact site representative with information recorded in #10.a.	<input type="checkbox"/>	<input type="checkbox"/>
11.	Fix the malfunction.	<input type="checkbox"/>	
12.	Once the malfunction is fixed, re-start the system per SOP if it had been shut down, and record start-up times and dates on this form.	<input type="checkbox"/>	<input type="checkbox"/>
13.	Record date that malfunction occurred, date that malfunction was repaired, and total time that system was out of service in boxes in Section 1 of this form.	<input type="checkbox"/>	
14.	Sign this form, copy it, and place it in the Start-up, Shutdown, Malfunction file.	<input type="checkbox"/>	
15.	If the procedures listed above were not followed, contact the site engineer immediately.	<input type="checkbox"/>	<input type="checkbox"/>



**EVENT CODES**

(Attachment to SSM Report Form)

***For Start-ups and Shutdowns:***

**Startup** : The setting in operation of an affected source or portion of an affected source for any purpose.

**Shutdown** : The cessation of operation of an affected source or portion of an affected source for any purpose.

**Code Event**

- 1 Maintenance
- 2 Suspected Collection System Malfunction
- 3 Suspected Control Device Malfunction
- 4 Suspected Continuous Monitoring System Malfunction (Temperature/Flow/Other)
- 5 Training
- 6 Gas System Construction/Expansion
- 99 Other (Describe)

**Malfunction** : Any sudden, infrequent and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

***For Malfunctions:***

- 10 Automatic shutdown of control device by designed protective systems
- 11 Autodialer Callout
- 12 Shutdown alarms that result in the device not shutting down
- 13 Unalarmed shutdown
- 14 Control Device Smoking
- 15 Inspection identified malfunction
- 16 Loss of power - utility down
- 17 Loss of power - unknown
- 18 Damaged Well, Header or Lateral Piping
- 19 Leaks at wellheads, valves, flanges, test ports, seals, couplings, etc.
- 20 Condensate Knock-out Problems
- 21 Collection Piping Blockages
- 22 Problems due to Settlement
- 23 Loss of phase
- 24 Blower overload condition
- 25 Blower bearing failure
- 26 Broken belts (if belt-drive) or broken coupling (if direct-drive) in blower
- 27 Continuous Monitoring System Malfunction - Thermocouple
- 28 Continuous Monitoring System Malfunction - UV Scanner
- 29 Continuous Monitoring System Malfunction - Flow Monitor
- 30 Continuous Monitoring System Malfunction - Flow Recorder
- 31 Continuous Monitoring System Malfunction - Temperature Recorder
- 32 Act of God
- 99 Other (Describe)



# Standard Operating Procedure

## Startup

- 1 Ensure that there are no unsafe conditions present
- 2 Ensure that the system is ready to start by checking and confirming the following:
  - a. Valves are in correct operating position
  - b. Levels, pressures, temperatures are within normal starting range
  - c. Alarms are cleared
  - d. Power is on and available to control panel and energized equipment
  - e. Emergency Stop is de-energized
- 3 Initiate start sequence (Note time and date on top section of form as Start)
- 4 Observe that system achieves normal operating ranges for levels, pressures, and temperatures (Note time and date on top section of form as End)
- 5 Complete top section of form. Duration is the time it takes to go from Step 3 to 4 (time from initiating the startup (actuating switch) to when the control device reaches normal operating conditions).

## Shutdown

- 1 Ensure that there are no unsafe conditions present
  - a. contact site manager immediately
- 2 Initiate shutdown sequence by one or more of the following (Note time and date on top section of form as Start)
  - a. Press Emergency Stop if necessary
  - b. Close On/ Off switch(es) or Push On/ Off button(s)
- 3 Observe that system achieves normal shutdown ranges for levels, pressures, and temperatures (Note time and date on top section of form as End)
- 4 Complete top section of form. Duration is the time it takes to go from Step 2 to 3 (time from initiating the shutdown (actuating switch) to when the automatic valve is completely closed and any gas mover equipment is stopped).



## SSM PLAN DEPARTURE REPORT FORM

1. Type of Event: <input type="checkbox"/> Startup <input type="checkbox"/> Shutdown <input type="checkbox"/> Malfunction		
2. Date:	Time:	Duration:
3. Provide detailed explanation of the circumstances of the startup, shutdown, or malfunction:*		
4. Provide description of corrective actions taken:*		
5. Describe the reasons the SSM Plan was not followed:*		
6. Describe any proposed revisions to the SSM Plan:*		
7. Name (print):		
8. Title		

\*Use additional sheets if necessary.

**Note: If the event documented in this form was a malfunction and if the SSM plan needs to be revised to address the particular type of malfunction that occurred, the revision of the SSM plan must be made within 45 days of the event.**

This form is intended to assist in meeting the recordkeeping and reporting requirements of 40 CFR 63.6(e)(3)(iv)



## **APPENDIX C**

**Reserved for Gas Plant or Landfill-Specific Information**



## **APPENDIX D**

**40 CFR 63, Subpart AAAA – *National Emission Standards for  
Hazardous Air Pollutants: Municipal Solid Waste Landfills***



## **Subpart AAAA—National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills**

**Source:** 68 FR 2238, Jan. 16, 2003, unless otherwise noted.

### **What This Subpart Covers**

#### **§ 63.1930 What is the purpose of this subpart?**

This subpart establishes national emission standards for hazardous air pollutants for existing and new municipal solid waste (MSW) landfills. This subpart requires all landfills described in §63.1935 to meet the requirements of 40 CFR part 60, subpart Cc or WWW and requires timely control of bioreactors. This subpart also requires such landfills to meet the startup, shutdown, and malfunction (SSM) requirements of the general provisions of this part and provides that compliance with the operating conditions shall be demonstrated by parameter monitoring results that are within the specified ranges. It also includes additional reporting requirements.

#### **§ 63.1935 Am I subject to this subpart?**

You are subject to this subpart if you meet the criteria in paragraph (a) or (b) of this section.

(a) You are subject to this subpart if you own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition and meets any one of the three criteria in paragraphs (a)(1) through (3) of this section:

(1) Your MSW landfill is a major source as defined in 40 CFR 63.2 of subpart A.

(2) Your MSW landfill is collocated with a major source as defined in 40 CFR 63.2 of subpart A.

(3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m<sup>3</sup>) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC as calculated according to §60.754(a) of the MSW landfills new source performance standards in 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan that applies to your landfill.

(b) You are subject to this subpart if you own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition, that includes a bioreactor, as defined in §63.1990, and that meets any one of the criteria in paragraphs (b)(1) through (3) of this section:

(1) Your MSW landfill is a major source as defined in 40 CFR 63.2 of subpart A.

(2) Your MSW landfill is collocated with a major source as defined in 40 CFR 63.2 of subpart A.

(3) Your MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m<sup>3</sup> and that is not permanently closed as of January 16, 2003.

#### **§ 63.1940 What is the affected source of this subpart?**

(a) An affected source of this subpart is a MSW landfill, as defined in §63.1990, that meets the criteria in §63.1935(a) or (b). The affected source includes the entire disposal facility in a contiguous geographic space where household waste is placed in or on land, including any portion of the MSW landfill operated as a bioreactor.

(b) A new affected source of this subpart is an affected source that commenced construction or reconstruction after November 7, 2000. An affected source is reconstructed if it meets the definition of reconstruction in 40 CFR 63.2 of subpart A.

(c) An affected source of this subpart is existing if it is not new.

#### **§ 63.1945 When do I have to comply with this subpart?**

(a) If your landfill is a new affected source, you must comply with this subpart by January 16, 2003 or at the time you begin operating, whichever is last.

(b) If your landfill is an existing affected source, you must comply with this subpart by January 16, 2004.

(c) If your landfill is a new affected source and is a major source or is collocated with a major source, you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW.

(d) If your landfill is an existing affected source and is a major source or is collocated with a major source, you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date



your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 13, 2004, whichever occurs later.

(e) If your landfill is a new affected source and is an area source meeting the criteria in §63.1935(a)(3), you must comply with the requirements of §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW.

(f) If your landfill is an existing affected source and is an area source meeting the criteria in §63.1935(a)(3), you must comply with the requirements in §§63.1955(b) and 63.1960 through 63.1980 by the date your landfill is required to install a collection and control system by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or EPA approved and effective State or tribal plan that applies to your landfill or by January 16, 2004, whichever occurs later.

#### **§ 63.1947 When do I have to comply with this subpart if I own or operate a bioreactor?**

You must comply with this subpart by the dates specified in §63.1945(a) or (b) of this subpart. If you own or operate a bioreactor located at a landfill that is not permanently closed as of January 16, 2003 and has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m<sup>3</sup>, then you must install and operate a collection and control system that meets the criteria in 40 CFR 60.752(b)(2)(v) of part 60, subpart WWW, the Federal plan, or EPA approved and effective State plan according to the

schedule specified in paragraph (a), (b), or (c) of this section.

(a) If your bioreactor is at a new affected source, then you must meet the requirements in paragraphs (a)(1) and (2) of this section:

(1) Install the gas collection and control system for the bioreactor before initiating liquids addition.

(2) Begin operating the gas collection and control system within 180 days after initiating liquids addition or within 180 days after achieving a moisture content of 40 percent by weight, whichever is later. If you choose to begin gas collection and control system operation 180 days after achieving a 40 percent moisture content instead of 180 days after liquids addition, use the procedures in §63.1980(g) and (h) to determine when the bioreactor moisture content reaches 40 percent.

(b) If your bioreactor is at an existing affected source, then you must install and begin operating the gas collection and control system for the bioreactor by January 17, 2006 or by the date your bioreactor is required to install a gas collection and control system under 40 CFR part 60, subpart WWW, the Federal plan, or EPA approved and effective State plan or tribal plan that applies to your landfill, whichever is earlier.

(c) If your bioreactor is at an existing affected source and you do not initiate liquids addition to your bioreactor until later than January 17, 2006, then you must meet the requirements in paragraphs (c)(1) and (2) of this section:

(1) Install the gas collection and control system for the bioreactor before initiating liquids addition.

(2) Begin operating the gas collection and control system within 180 days after initiating liquids addition or within 180 days after achieving a moisture content of 40 percent by weight, whichever is later. If you choose to begin gas collection and control system operation 180 days after achieving a 40 percent moisture content instead of 180 days after liquids addition, use the procedures in §63.1980(g) and (h) to determine when the bioreactor moisture content reaches 40 percent.

#### **§ 63.1950 When am I no longer required to comply with this subpart?**

You are no longer required to comply with the requirements of this subpart when you are no longer required to apply controls as specified in 40 CFR 60.752(b)(2)(v) of subpart WWW, 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 your landfill.

#### **§ 63.1952 When am I no longer required to comply with the requirements of this subpart if I own or operate a bioreactor?**

If you own or operate a landfill that includes a bioreactor, you are no longer required to comply with the requirements of this subpart for the bioreactor provided you meet the conditions of either paragraphs (a) or (b).

(a) Your affected source meets the control system removal criteria in 40 CFR 60.752(b)(2)(v) of part 60, subpart WWW or the bioreactor meets the criteria for a nonproductive area of the landfill in 40 CFR 60.759(a)(3)(ii) of part 60, subpart WWW.



(b) The bioreactor portion of the landfill is a closed landfill as defined in 40 CFR 60.751, subpart WWW, you have permanently ceased adding liquids to the bioreactor, and you have not added liquids to the bioreactor for at least 1 year. A closure report for the bioreactor must be submitted to the Administrator as provided in 40 CFR 60.757(d) of subpart WWW.

(c) Compliance with the bioreactor control removal provisions in this section constitutes compliance with 40 CFR part 60, subpart WWW or the Federal plan, whichever applies to your bioreactor.

## **Standards**

### **§ 63.1955 What requirements must I meet?**

(a) You must fulfill one of the requirements in paragraph (a)(1) or (2) of this section, whichever is applicable:

(1) Comply with the requirements of 40 CFR part 60, subpart WWW.

(2) Comply with the requirements of the Federal plan or EPA approved and effective State plan or tribal plan that implements 40 CFR part 60, subpart Cc.

(b) If you are required by 40 CFR 60.752(b)(2) of subpart WWW, the Federal plan, or an EPA approved and effective State or tribal plan to install a collection and control system, you must comply with the requirements in §§63.1960 through 63.1985 and with the general provisions of this part specified in table 1 of this subpart.

(c) 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, you must 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 all affected sources must comply with the SSM requirements in Subpart A of this part as specified in Table 1 of this subpart and all affected sources must submit compliance reports every 6 months as specified in §63.1980(a) and (b), 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.

(d) If you own or operate a bioreactor that is located at a MSW landfill that is not permanently closed and has a design capacity equal to or greater than 2.5 million Mg and 2.5 million m<sup>3</sup>, then you must meet the requirements of paragraph (a) and the additional requirements in paragraphs (d)(1) and (2) of this section.

(1) You must comply with the general provisions specified in Table 1 of this subpart and §§63.1960 through 63.1985 starting on the date you are required to install the gas collection and control system.

(2) You must extend the collection and control system into each new cell or area of the bioreactor prior to initiating liquids addition in that area, instead of the schedule in 40 CFR 60.752(b)(2)(ii)(A)(2).

## **General and Continuing Compliance Requirements**

### **§ 63.1960 How is compliance determined?**

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 40 CFR 60.756(b)(1), (c)(1), and (d) of subpart WWW, are used to demonstrate compliance with the operating conditions for control systems. If a deviation occurs, you have failed to meet the control device operating conditions described in this subpart and have deviated from the requirements of this subpart. Finally, you must develop a written SSM plan according to the provisions in 40 CFR 63.6(e)(3). A copy of the SSM plan must be maintained on site. Failure to write or maintain a copy of the SSM plan is a deviation from the requirements of this subpart.

[68 FR 2238, Jan. 16, 2003, as amended at 71 FR 20462, Apr. 20, 2006]

### **§ 63.1965 What is a deviation?**

A deviation is defined in §63.1990. For the purposes of the landfill monitoring and SSM plan requirements, deviations include the items in paragraphs (a) through (c) of this section.

(a) A deviation occurs when the control device operating parameter boundaries described in 40 CFR 60.758(c)(1) of subpart WWW 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.

[68 FR 2238, Jan. 16, 2003, as amended at 71 FR 20462, Apr. 20, 2006]

### **§ 63.1975 How do I calculate the 3-hour block average used to demonstrate compliance?**

Averages are calculated in the same way as they are calculated in 40 CFR part 60, subpart WWW, except that the data collected during the events listed in paragraphs (a), (b), (c), and (d) of this section are not to be included in any average computed under this subpart:

(a) Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.

(b) Startups.

(c) Shutdowns.

(d) Malfunctions.

### **Notifications, Records, and Reports**

#### **§ 63.1980 What records and reports must I keep and submit?**

(a) Keep records and reports as specified in 40 CFR part 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 your landfill, with one exception: You must submit the annual report described in 40 CFR 60.757(f) every 6 months.

(b) You must also keep records and reports as specified in the general provisions of 40 CFR part 60 and this part as shown in Table 1 of this subpart. Applicable records in the general provisions include items such as SSM plans and the SSM plan reports.

(c) For bioreactors at new affected sources you must submit the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) within 180 days after the date you are required to begin operating the gas collection and control system by §63.1947(a)(2) of this subpart.

(d) For bioreactors at existing affected sources, you must submit the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) within 180 days after the compliance date specified in §63.1947(b) of this subpart, unless you have previously submitted a compliance report for the bioreactor required by 40 CFR part 60, subpart WWW, the Federal plan, or an EPA approved and effective State plan or tribal plan.

(e) For bioreactors that are located at existing affected sources, but do not initiate liquids addition until later than the compliance date in §63.1947(b) of this subpart, you must submit the initial semiannual compliance report and performance tests results described in 40 CFR 60.757(f) within 180 days after the date you are required to begin operating the gas collection and control system by §63.1947(c) of this subpart.

(f) If you must submit a semiannual compliance report for a bioreactor as well as a semiannual compliance report for a conventional portion of the same landfill, you may delay

submittal of a subsequent semiannual compliance report for the bioreactor according to paragraphs (f)(1) through (3) of this section so that the reports may be submitted on the same schedule.

(1) After submittal of your initial semiannual compliance report and performance test results for the bioreactor, you may delay submittal of the subsequent semiannual compliance report for the bioreactor until the date the initial or subsequent semiannual compliance report is due for the conventional portion of your landfill.

(2) You may delay submittal of your subsequent semiannual compliance report by no more than 12 months after the due date for submitting the initial semiannual compliance report and performance test results described in 40 CFR 60.757(f) for the bioreactor. The report shall cover the time period since the previous semiannual report for the bioreactor, which would be a period of at least 6 months and no more than 12 months.

(3) After the delayed semiannual report, all subsequent semiannual reports for the bioreactor must be submitted every 6 months on the same date the semiannual report for the conventional portion of the landfill is due.

(g) If you add any liquids other than leachate in a controlled fashion to the waste mass and do not comply with the bioreactor requirements in §§63.1947, 63.1955(c) and 63.1980(c) through (f) of this subpart, you must keep a record of calculations showing that the percent moisture by weight expected in the waste mass to which liquid is added is less than 40 percent. The calculation must consider the waste mass, moisture content of the incoming waste, mass of water added to the waste including leachate



recirculation and other liquids addition and precipitation, and the mass of water removed through leachate or other water losses. Moisture level sampling or mass balances calculations can be used. You must document the calculations and the basis of any assumptions. Keep the record of the calculations until you cease liquids addition.

(h) If you calculate moisture content to establish the date your bioreactor is required to begin operating the collection and control system under §63.1947(a)(2) or (c)(2), keep a record of the calculations including the information specified in paragraph (g) of this section for 5 years. Within 90 days after the bioreactor achieves 40 percent moisture content, report the results of the calculation, the date the bioreactor achieved 40 percent moisture content by weight, and the date you plan to begin collection and control system operation.

## **Other Requirements and Information**

### **§ 63.1985 Who enforces this subpart?**

(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or tribal agency. If the EPA Administrator has delegated authority to a State, local, or tribal agency, then that agency as well as the U.S. EPA has the authority to implement and enforce this subpart. Contact the applicable EPA Regional Office to find out if this subpart is delegated to a State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in

paragraph (c) of this section are retained by the EPA Administrator and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are as follows. Approval of alternatives to the standards in §63.1955. Where these standards reference another subpart, the cited provisions will be delegated according to the delegation provisions of the referenced subpart.

### **§ 63.1990 What definitions apply to this subpart?**

Terms used in this subpart are defined in the Clean Air Act, 40 CFR part 60, subparts A, Cc, and WWW; 40 CFR part 62, subpart GGG, and subpart A of this part, and this section that follows:

*Bioreactor* means a MSW landfill or portion of a MSW landfill where any liquid other than leachate (leachate includes landfill gas condensate) is added in a controlled fashion into the waste mass (often in combination with recirculating leachate) to reach a minimum average moisture content of at least 40 percent by weight to accelerate or enhance the anaerobic (without oxygen) biodegradation of the waste.

*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 this subpart, 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 this subpart.

*Emissions limitation* means any emission limit, opacity limit, operating limit, or visible emissions limit.

*EPA approved State plan* means a State plan that EPA has approved based on the requirements in 40 CFR part 60, subpart B to implement and enforce 40 CFR part 60, subpart Cc. An approved State plan becomes effective on the date specified in the notice published in the Federal Register announcing EPA's approval.

*Federal plan* means the EPA plan to implement 40 CFR part 60, subpart Cc for existing MSW landfills located in States and Indian country where State plans or tribal plans are not currently in effect. On the effective date of an EPA approved State or tribal plan, the Federal plan no longer applies. The Federal plan is found at 40 CFR part 62, subpart GGG.

*Municipal solid waste landfill or MSW landfill* means an entire disposal facility in a contiguous geographical space where household waste is placed in or on land. A municipal solid waste landfill may also receive other types of RCRA Subtitle D wastes (see §257.2 of this chapter) such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of a municipal solid waste landfill



may be separated by access roads. A municipal solid waste landfill may be publicly or privately owned. A municipal solid waste landfill may be a new municipal solid waste landfill, an existing municipal solid waste landfill, or a lateral expansion.

*Tribal plan* means a plan submitted by a tribal authority pursuant to 40 CFR parts 9, 35, 49, 50, and 81 to implement and enforce 40 CFR part 60, subpart Cc.

*Work practice standard* means any design, equipment, work

practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

As stated in §§63.1955 and 63.1980, you must meet each requirement in the following table that applies to you.

**Table 1 to Subpart AAAA of Part 63—Applicability of NESHAP General Provisions to Subpart AAAA**

<b>Part 63 Citation</b>	<b>Description</b>	<b>Explanation</b>
63.1(a)	Applicability: general applicability of NESHAP in this part	Affected sources are already subject to the provisions of paragraphs (a)(10)–(12) through the same provisions under 40 CFR, part 60 subpart A.
63.1(b)	Applicability determination for stationary sources	
63.1(e)	Title V permitting	
63.2	Definitions	
63.4	Prohibited activities and circumvention	Affected sources are already subject to the provisions of paragraph (b) through the same provisions under 40 CFR, part 60 subpart A.
63.5(b)	Requirements for existing, newly constructed, and reconstructed sources	
63.6(e)	Operation and maintenance requirements, startup, shutdown and malfunction plan provisions	
63.6(f)	Compliance with nonopacity emission standards	Affected sources are already subject to the provisions of paragraphs (f)(1) and (2)(i) through the same provisions under 40 CFR, part 60 subpart A.
63.10(b)(2)(i)–(b)(2)(v)	General recordkeeping requirements	
63.10(d)(5)	If actions taken during a startup, shutdown and malfunction plan are consistent with the procedures	



	in the startup, shutdown and malfunction plan, this information shall be included in a semi-annual startup, shutdown and malfunction plan report. Any time an action taken during a startup, shutdown and malfunction plan is not consistent with the startup, shutdown and malfunction plan, the source shall report actions taken within 2 working days after commencing such actions, followed by a letter 7 days after the event	
63.12(a)	These provisions do not preclude the State from adopting and enforcing any standard, limitation, etc., requiring permits, or requiring emissions reductions in excess of those specified	
63.15	Availability of information and confidentiality	



## **DRAWINGS AND FIGURES**



