Scearce, Lynn

From:

Scearce, Lynn

Sent:

Wednesday, July 20, 2011 2:19 PM

To:

'thawkins@wm.com'

Cc:

'abrams.heather@epa.gov'; 'forney.kathleen@epa.gov'; 'dee morse@nps.gov'; Anderson, Lennon; 'dbuff@golder.com'; 'lynn.scearce@dep.state.fl.us'; Heron, Teresa; 'Friday, Barbara'

Subject:

Okeechobee Landfill, # 0930104-018-AC-(PSD-FL-382A), Final Permit

Tracking:

Recipient

'thawkins@wm.com' 'abrams.heather@epa.gov' 'forney.kathleen@epa.gov' 'dee morse@nps.gov' Anderson, Lennon

'dbuff@golder.com' 'lynn.scearce@dep.state.fl.us'

Heron, Teresa 'Friday, Barbara' Friday, Barbara

Scearce, Lynn

Delivery

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ox done

Dear Sir/ Madam:

Attached is the official Notice of Final Permit for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate replywill preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Attention:

Owner/Company Name: OKEECHOBEE LANDFILL, INC.

Facility Name: OKEECHOBEE LANDFILL

Project Number: 0930104-018-AC

Permit Status: FINAL

Permit Activity: CONSTRUCTION Facility County: OKEECHOBEE

Click on the following link to access the permit project documents: http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf permit zip files/0930104.018.AC.F pdf.zip

The Office of Permitting and Compliance Section is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at http://www.dep.state.fl.us/air/emission/apds/default.asp.

Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Office of Permitting and Compliance.

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html>.

Regards, Lynn Scearce Office of Permitting and Compliance (OPC) Division of Air Resources Management 850-717-9025



Florida Department of Environmental Protection

Rick Scott Governor

Jennifer Carroll Lt. Governor

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Herschel T. Vinyard Jr. Secretary

PERMITTEE:

Okeechobee Landfill, Inc. c/o Waste Management Inc. of Florida 2700 Wiles Road Pompano Beach, Florida 33073

Responsible Official: Tim Hawkins, Vice President, South Area Air Permit Modification No. 0930104-018-AC Modifies and Replaces Air Permit No. 0930104-014-AC

Expires: June 30, 2015 PSD-FL-382A

SIC No. 4953

Okeechobee Landfill (OL) Landfill Gas to Energy Project

PROJECT AND LOCATION:

This is the final modified air construction permit for a landfill gas (LFG) to energy (LFGTE) project at the Okeechobee Landfill (OL) in Okeechobee County, Florida. The OL is located at 10800 N.E. 128th Avenue, Okeechobee County, Florida. The OL UTM coordinates are Zone 17; 530.28 kilometer (km) East and 3023.96 km North.

This final permit modification 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 modification 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. The project was previously reviewed in accordance with 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, including a determination of Best Available Control Technology (BACT).

Upon issuance of this final permit modification, 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 the Division of Air Resource Management

(Signature)

1-20-11

(Date)

Jeffery F. Koemer

(Printed Name of Above Designee)

JFK/aal/tmh/dlr

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agen	ıcy clerk hereby ce r tifi	es that this Final Air Permit Modification
package (including the Final Determination a	nd the Final Permit wi	th Appendices) was sent by electronic mail,
or a link to these documents made available e	•	licly accessible server, with received receipt
requested before the close of business on	7-20-11	to the persons listed below.

Tim Hawkins, Waste Management of Florida, Inc.: thawkins@wm.com

Heather Abrams, U.S. EPA Region 4: abrams.heather@epa.gov
Kathleen Forney, U.S. EPA Region 4: forney.kathleen@epa.gov
Dee Morse, National Park Service, Denver CO: dee_morse@nps.gov

Lennon Anderson, DEP SED: <u>lennon.anderson@dep.state.fl.us</u>

David Buff, Golder Associates, Inc.: dbuff@golder.com

Lynn Scearce, DEP BAR Reading File: lynn.scearce@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.

FINAL DETERMINATION

Air Construction Permit
Okeechobee Landfill, Inc. – Landfill Gas to Energy Project
DEP File No. 0930104-018-AC (PSD-FL-382A)

PERMITTEE

Okeechobee Landfill, Inc. (OLI)
(a Waste Management Company)
c/o Waste Management, Inc. of Florida
1000 Parkwood Circle SE, Suite 700
Atlanta, Georgia 30339

PERMITTING AUTHORITY

Florida Department of Environmental Protection (Department) Division of Air Resource Management Bureau of Air Regulation, Special Projects Section 2600 Blair Stone Road, MS #5505 Tallahassee, Florida 32399-2400

PROJECT

DEP File No. 0930104-018-AC (PSD-FL-382A) Okeechobee Landfill Landfill Gas to Energy Project Okeechobee County

The Okeechobee Landfill (OL) is located in Okeechobee County at 10800 NE 128th Street near Okeechobee, Florida. The landfill is operated by Okeechobee Landfill, Inc.(OLI), a Waste Management Company. The OL comprises the Berman Road Landfill and the authorized development known as the Clay Farms Landfill. The total OL comprises 948 acres within 4150 acres owned by the applicant.

On April 19, 2010 the Florida Department of Environmental Protection (FDEP) issued the PSD-FL-382 (0930104-014-AC) air construction permit pursuant to the rules for the Prevention of Significant Deterioration of Air Quality (PSD). This permit requires construction of a landfill gas (LFG) desulfurization plant (GDP) for the existing LFG and flares and authorizes the installation of a landfill gas to energy (LFGTE) plant using desulfurized LFG as fuel to be combusted in a 15 megawatt (MW) Solar Titan 130 combustion turbine-electrical generator (CTG); three 3.5 MW Solar Centaur 40 CTG; and five backup open flares. This permit is available at:

http://www.dep.state.fl.us/air/emission/construction/okeechobee/FPERMIT382.pdf

On October 12, 2010, OLI submitted a request to modify the Final permit PSD-FL-382 (0930104-014-AC): The changes requested by OLI were related to:

- Project schedule and facility descriptions;
- Operational, monitoring, recordkeeping and reporting for the GDP and flares;
- Purpose and restrictions on open flares; and
- Emission and fuel monitoring

No PSD regulated air emissions were expected to increase as a result of the permit modification request. Consequently, no air modeling was submitted and a new BACT determination was not required.

The permit modification application, Draft Permit modification, the Technical Evaluation and Preliminary Determination (TEPD), Intent to Issue and Public Notice, Revised Draft Permit modification, addendum to the TEPD, Revised Intent to Issue and Public Notice and key correspondence are available at the following web link under the heading Permit # PSD-FL-382A (0930104-018-AC):

http://www.dep.state.fl.us/air/emission/construction/okeechobee.htm

DEP File No. DEP File No. 0930104-018-AC (PSD-FL-382A) Final Determination Okeechobee Landfill, Inc. Page 2

As of late January 2011, OLI had completed installation of three new open flares and extensive piping to deliver preconditioned raw LFG to the GDP. It should also be noted that OLI decided to the install the biological process called the Paques/THIOPAQ® rather than the chemical process called LO-CAT® originally planned.

NOTICES AND PUBLICATION

On April 6, 2011, the Permitting Authority gave notice of its intent to issue an air permit to the applicant for the project described above. OLI did not publish the Public Notice and elected to submit Requests for Extension of Time in order to negotiate with the Department the Draft permit. These requests were dated April 22, 2011 for an extension until May 2 and April 28 for an extension until June 2. The last one "Order Granting Second Request for Extension of Time to File a Petition for Hearing" was granted on May 6, 2011 until OLI's requested date of June 2, 2011.

On June 20, 2011, the Permitting Authority gave a revised Notice of its Intent to Issue an Air Permit to the applicant for this project as described above. The applicant published the revised Public Notice of Intent to Issue Air Permit on June 29, 2011, in the legal section of a newspaper of general circulation in the area affected by this project: <u>Independent Newspapers-Okeechobee News.</u>

COMMENTS ON THE DRAFT PERMIT

No comments were received from the applicant, consultant, government agencies or the public.

CONCLUSION

The final action of the Department is to issue the final permit with no changes from the draft permit.

FACILITY DESCRIPTION

Okeechobee Landfill, Inc., has operated a municipal solid waste (MSW) landfill in Okeechobee County since 1981. The 4,150 acre site contains the existing Berman Road landfill, the Clay Farms landfill and additional auxiliary services. The property boundary extends south to State Road (SR) 70 and east into neighboring St. Lucie County.

The presently active part of the landfill comprises 309 acres. The total acreage for which solid waste permits have been issued comprises 948 acres. Methane-rich LFG produced from the decomposition of waste materials placed in the active landfill is collected by a LFG collection system (LFGCS). The collected LFG is then flared. The facility is currently operating under Title V air permit No. 0930104-016-AV.

PROPOSED PROJECT

The permit requires construction of a LFG gas desulfurization plant (GDP) for existing LFG and flares and authorizes the future installation of a LFGTE plant using desulfurized LFG as fuel in combustion turbine generators (CTG) with back up open flares.

In addition, as a result of this project, the LFGCS will be expanded and the existing system of flares will be shut down and replaced by an expanded system of open back up flares in a central flaring area.

As a result of these changes, significant pollutant emission increases will occur for nitrogen oxides (NO_X), sulfur dioxide (SO₂), carbon monoxide (CO), and particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀).

The existing facility is comprised of the following emissions units (EU) at the OL.

Facility I	D No. 0930104	
EU ID No.	Emission Unit Description	
001	Municipal solid waste landfill with LFGCS.	
003	Enclosed flare with a capacity of 3,000 scfm, including a leachate evaporation unit.	
004	Backup open flare with a capacity of 2,800 scfm.	
005	Enclosed flare with a capacity of 3,000 scfm, including a leachate evaporation unit.	
006/CD*-04	Temporary open flare with a capacity of 3,300 scfm for odor control.	
007/CD*-05	Temporary open flare with a capacity of 3,000 scfm for odor control. Not Constructed.	

^{*} Control Device (CD) number is used by the company to identify their flares.

The following table is a list of the changes planned to the existing EU at the OL as well as the new EU authorized by this permit. EU 003, 004 and 005 will be deactivated as a result of this project.

ARMS EU ID No.	New Emission Unit Description	
001	Municipal solid waste landfill with LFGCS and GDP.	
003	Existing enclosed flare with a capacity of 3,000 standard cubic feet per minute (scfm) and including a leachate evaporation unit. To be ultimately deactivated.	
004	Existing backup open flare with a capacity of 2,800 scfm. To be ultimately deactivated.	
005	Enclosed flare with a capacity of 3,000 (scfm) and including a leachate evaporation unit. To be ultimately deactivated.	

SECTION I – GENERAL INFORMATION

ARMS EU ID No.	New Emission Unit Description	
006/CD*-04	Temporary open flare with a capacity of 3,300 scfm for odor control. Deactivated.	
007/CD*-05	Temporary open flare with a capacity of 3,000 scfm for odor control. Not constructed.	
008	New open flare with a total capacity of 1,500 scfm. Initial installation.	
009	New open flare with a total capacity of 3,000 scfm. Initial installation.	
010	New open flare with a total capacity of 3,000 scfm. Initial installation.	
011	New open flare with a total capacity of 3,000 scfm. Initial installation.	
012	New open flare with a total capacity of 3,000 scfm. Initial installation.	
013	One 15 MW Model Solar Titan 130 (T-130) CTG. Initial installation.	
014 – 016	Three 3.5 MW Model Solar Centaur 40 (C-40) CTG. Initial installation.	

^{*} Control Device (CD) number is used by the company to identify their flares.

REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C., PSD.
- The facility is subject to 40 CFR 60 for New Source Performance Standards (NSPS) under Section 111 of the CAA.
- The facility is subject to 40 CFR 63 for National Emissions Standards for Hazardous Air Pollutants (NESHAP) under Section 112 of the Clean Air Act.

SECTION II ADMINISTRATIVE REQUIREMENTS

- Permitting Authority: The Permitting Authority for this project is the Bureau of Air Regulation in the Division of Air Resource Management of the Department. The mailing address for the Bureau of Air Regulation is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. All documents related to applications for permits to operate an emissions unit shall be submitted to the Air Resource Section of the Department's Southeast District Office, 400 North Congress Avenue, Suite 200, West Palm Beach, FL 33401.
- 2. <u>Compliance Authority</u>: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Southeast District Office. The mailing address of the Southeast District Office is 400 North Congress Avenue, Suite 200, West Palm Beach, FL 33401 and the phone number is 561-681-6600.
- 3. Existing Permits: Unless otherwise specified, these conditions are in addition to all other applicable air permit conditions and regulatory requirements. The permittee shall continue to comply with the conditions of previous permits, which include other restrictions and standards regarding capacities, production, operation, fuels, emissions, monitoring, record keeping, reporting, etc for the existing emissions units. The permittee shall continue to comply with all applicable conditions from valid air construction and Title V operation permits. [Application No. 0930104-014-AC and Rule 62-4.070 (3), F.A.C.]
- 4. <u>Appendices</u>: The following Appendices are attached as a part of this permit and must be complied with by the permittee:

a. Appendix A: NSPS Subpart A and NESHAP Subpart A - Identification of General

Provisions;

b. Appendix AAAA: NESHAP Subpart AAAA for Municipal Solid Waste Landfills;

c. Appendix CC: Common Conditions;

d. Appendix CCD: Common Control Devices - Flares;

e. Appendix CF: Citation Formats and Glossary of Common Terms;

f. Appendix CTR: Common Testing Requirements;

g. Appendix GC: General Conditions;

h. Appendix H₂S: Protocol for Daily Sampling to Measure H₂S Concentration in LFG;

i. Appendix KKKK: NSPS Subpart KKKK – Requirements for Gas Turbines and Duct Burners;

j. Appendix SC: Standard Conditions;

k. Appendix WWW: NSPS Subpart WWW – for Municipal Solid Waste Landfills; and,

I. Appendix YYYY: NESHAP Subpart YYYY Requirements for Gas Turbines.

- 5. 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.
- 6. 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.]

SECTION II ADMINISTRATIVE REQUIREMENTS

- 7. Installation of GDP Required: The Department finds good cause requiring the permittee to conform to new or additional conditions. Therefore, the permittee is required to install and operate by June 30, 2012 a GDP such that all collected LFG shall be treated to a concentration less than or equal to 200 parts per million by volume (ppmv) of hydrogen sulfide (H₂S) or 210 ppmv of total sulfur (TS) as determined by continuous fuel monitor (CFM) prior to combustion whether or not the permittee builds a LFGTE plant.
 - [Rules 62-212.400, 62-4.070(3) and 62-4.080(1)(a), (b) and (c), F.A.C.]
- 8. <u>Modifications</u>: 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.]

9. Source Obligation:

- (a) The permittee is required to install and operate a GDP whether or not a CTG and flares are constructed. Authorization to construct the CTG and additional flares shall expire if within 18 months after receipt of this permit, their construction has not commenced; if construction is discontinued for a period of 18 months or more unless authorized by the Permitting Authority, or if construction is not completed within a reasonable time as defined by the Permitting Authority. 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 or by written approval by the Department.
- (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.]

10. <u>Title V Permit</u>: 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 operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V 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 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.]

{Permitting Note: The Title V Renewal Application Due Date is February 22, 2013, whereas this permit expires June 30, 2015. The described Title V Renewal Application should also include those emissions units for which the required work has been completed and have commenced operation. A subsequent application for a Title V operation permit revision should be submitted in accordance with the requirements given in the above paragraph.}

SECTION II ADMINISTRATIVE REQUIREMENTS

- 11. 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. 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 particulate 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. In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice. [Rule 62-296.320(4)(c), F.A.C.]
- 12. Excess Emissions: Except as required by specific conditions of this permit dealing with excess emissions with regard to individual emission units, the following conditions apply to excess emissions at the OL.
 - a. <u>Allowed</u>: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
 - b. <u>Malfunction</u>: Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.
 - c. <u>Department Discretion</u>: Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest.
 - d. <u>Department Notification</u>: In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rule 62-210.700, 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. and Rule 62-4.070, F.A.C. Reasonable Assurance]

 {Permitting 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. Open Burning Prohibited: No person shall ignite, cause to be ignited, or permit to be ignited, any material which will result in any prohibited open burning as regulated by chapter 62-256, F.A.C.; nor shall any person suffer, allow, conduct or maintain any prohibited open burning.

 [Rule 62-256.300, F.A.C.]

SECTION III - EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION A. MUNICIPAL SOLID WASTE LANDFILL, GDP AND LFGCS (EU 001)

The Specific Conditions listed in this subsection apply to the following emission unit:

EU ID No.	EMISSION UNIT DESCRIPTION			
001	Okeechobee Landfill (OL): The OL comprises two landfills sites, the Berman Road landfill and the Clay Farms landfill. Each landfill is subject to Air and Solid Waste regulations. This Air Permit regulates only air pollutant emissions from the OL. The Solid Waste permits regulate among other requirements the capacity, disposal rate and the number of cells constructed. A summary of the OL follows:			
	Berman Road Landfill: This is an existing emission unit 309 acres in size. Clay Farm Landfill: This is a new 639 acre landfill located in another portion of the overall existing stationary source.			
	• GDP Plant: The OL is required to construct and operate a GDP plant to reduce H ₂ S concentrations in the LFG prior to its combustion.			
	• <u>LFGCS</u> : The system used to collect the LFG prior to combustion in CTG or back flares. The existing LFGCS will be expanded as a result of this project.			

CONSTRUCTION

- 1. <u>GDP</u>: The permittee is required to install and operate by June 30, 2012 a GDP such that all collected LFG shall be treated to a concentration less than or equal to 200 ppmv H₂S or 210 ppmv of TS prior to combustion whether or not the permittee builds a LFGTE plant. [Rules 62-212.400, 62-4.070(3) and 62-4.080(1)(a), (b) and (c), F.A.C.]
- LFGCS: By June 30, 2012 all LFG generated at the OL shall be collected at a sufficient extraction rate, while minimizing off-site migration of subsurface gas from each area, cell. or group of cells in the landfill in which the initial solid waste has been placed for a period of 3 years or more. [Rules 62-212.400 (PSD), 62-210.200 (BACT), 62-4.070 (3) and 62-296.320(2), F.A.C.]
 {Permitting Note: The time requirement of 3 years based on BACT and odor control and is more

PERFORMANCE RESTRICTIONS

- 3. <u>LFGCS Capacity</u>: The permitted capacity of the LFGCS is 13,500 scfm on a 30 day rolling average basis. [Application No. 0930104-014-AC and Rules 62-212.400 and 62-4.070 (3), F.A.C] {Permitting Note: The 13,500 scfm of LFG flow is the maximum permitted flowrate, the LFGCS is capable of collecting more than 13,500 scfm of LFG, if available. The permitted flowrate of LFG is 13,500 scfm on a 30 day rolling average basis.}
- 4. <u>GPD Capacity</u>: The maximum permitted capacity of the GDP is 32,500 scfm of LFG on a 30 day rolling average basis.
 - [Application No. 0930104-014-AC and Rules 62-212.400 and 62-4.070 (3), F.A.C].

stringent than the 5 year time requirement in 40 CFR 60, Subpart WWW.}

- {The permittee may construct a GDP of sufficient size to treat LFG throughout the projected lifetime of the OL even though the permitted capacity of the LFGCS is lower. Compliance shall be determined after each operating day by calculating the arithmetic average of all the valid hourly averages from that operating day and the prior 30-1 operating days.}
- Operation: The hours of operation of this emissions unit with regard to the GDP and LFGCS are not limited (8,760 hours per year).
 [Application No. 0930104-014-AC and Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION A. MUNICIPAL SOLID WASTE LANDFILL, GDP AND LFGCS (EU 001)

EMISSIONS LIMITATIONS

6. <u>H₂S or TS Concentration</u>: The H₂S or TS concentration in the LFG after it is treated by the GDP shall not exceed 200 ppmv of H₂S or 210 ppmv of TS prior to combustion. The H₂S or TS content of the landfill gas shall be monitored in accordance with specific **Condition 8** of this subsection. [Rules 62-212.400 and 62-4.070(3), F.A.C.]

MONITORING REQUIREMENTS

- 7. <u>LFG Monitoring</u>: The permittee shall comply with the monitoring requirements of 40 CFR 60 Subpart WWW. [Rules 62-4.070 (3) F.A.C. and 40 CFR Part 60, Subpart WWW]
- 8. <u>H₂S-CFM or TS-CFM</u>: The permittee shall install a H₂S or TS-CFM to continuously monitor and record the concentration of H₂S or TS in the LFG after it is processed by the GDP and before it is combusted in the CTG or the backup flares.
 - a. The CFM shall be calibrated, maintained, and operated according to the manufacturer specifications.
 - b. The LFG may be monitored at only one location if monitoring at this location accurately represents the concentration of H₂S or TS in the LFG being combusted. The applicant shall notify the Compliance Authority of the CFM location(s) 90 days before installation of the CFM.
 - c. Within 30 days of initial startup of H₂S or TS CFM (or startup of any new or replacement H₂S or TS CFM), the performance evaluations for this H₂S or TS CFM shall be done using the manufacturer's specifications and procedures.
 - d. When the CFM is not available, the permittee shall implement the alternative procedures described in Appendix H₂S to demonstrate compliance with H₂S concentration limits in Condition 6 above and Subsection B, Condition 6. The permittee shall follow the sampling requirements of § 60.4360 and § 60.4370 to demonstrate compliance with the TS concentration limits Condition 6 above and Subsection B, Condition 6 when the CFM is unavailable.
 - e. The H₂S or TS-CFM may be used to demonstrate compliance with the SO₂ emission limits applicable to the CTG (EU 013, 014, 015 and 016) provided the CFM meets the fuel monitoring requirements for CTG given in **Subsections C and D** of this permit.

[Design; Rules 62-210.200 (BACT) and 62-4.070(3), F.A.C.]

RECORDKEEPING AND REPORTING REQUIREMENTS

- 9. <u>GDP Reports and Records</u>: The permittee shall maintain the following reports and records on a monthly basis and submit a summary report to the compliance authority no later than 45 days after the end of each calendar quarter: total daily and monthly gas flow rates in scfm; average daily and monthly H₂S or TS concentration in the processed (cleaned) LFG in ppmv; and any GDP malfunctions and their cause along with the corrective actions taken. [Rules 62-4.070 (3) and 62-210.200 (BACT), F.A.C.]
- 10. <u>H₂S or TS LFG Concentration Exceedance</u>: If an exceedance of the allowed H₂S concentration of 200 ppmv or the allowed TS concentration of 210 ppmv from the 'cleaned' LFG from the GDP occurs, based on a 30 day rolling average, the following information must be reported within 7 days of the exceedance to the Compliance Authority:
 - The date that the exceedance occurred;
 - An explanation of the exceedance;
 - A description of the action taken, if any;
 - For any periods for which monitoring data are not available, any changes made in operation of the CFM system during the period of data unavailability which could affect the ability of the system to record the applicable H₂S or TS concentration limit. Operations of the CFM and affected facility

SECTION III - EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION A. MUNICIPAL SOLID WASTE LANDFILL, GDP AND LFGCS (EU 001)

- during periods of data unavailability are to be compared with operation of the CFM and affected facility before and following the period of data unavailability; and,
- A written statement, signed by a responsible official, certifying the accuracy and completeness of the information contained in the report.

[Rules 62-4.070 (3) and 62-210.200 (BACT), F.A.C.]

- 11. Reporting Requirements: At least five (5) working days prior to the completion of construction of the emissions source(s) authorized under this Permit, the owner/operator shall provide written notice to the Compliance Authority of the completion of the construction and its intent to commence operation. The notice shall specify when the construction will be completed and when the facility owner or operator expects to commence operation. [Rules 62-4.070 (3) F.A.C.]
- 12. Records and Reports. The permittee shall maintain a record of any information required by this Permit. Such records shall be retained for a minimum of five (5) years and shall be made available to the Department upon request. [Rules 62-4.070 (3) F.A.C.]

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION B. OPEN FLARES (EU 008, 009, 010, 011, and 012)

The Specific Conditions listed in this subsection apply to the following emission units:

EU ID No.	FLARES EMISSION UNIT DESCRIPTION	
008	1,500 scfm Open Utility Flare	
009	3,000 scfm Open Utility Flare	
010	3,000 scfm Open Utility Flare	
011	3,000 scfm Open Utility Flare	
012	3,000 scfm Open Utility Flare	

Operation of the flares described in this subsection shall meet all the applicable requirements specified in Appendix CCD of this permit.

[Application No. 0930104-014-AC and Rules 62-210.200(PTE), F.A.C., 62-212.400 and 62-4.070 (3), F.A.C.]

FLARES INSTALLATION AND CONSTRUCTION

- 1. Flares Installation and Construction: The permittee is authorized to install one 1,500 scfm open flare and four 3,000 scfm open flares to combust LFG as necessary prior to the construction of and as backup to the CTG that will combust the LFG to generate electrical power. The continuous presence of flare flames shall be monitored using thermocouples or any other equivalent device to detect the presence of a flame pursuant to 40 CFR 60.756(c)(1).
 - [Application Nos. 0930104-014-AC and 0930104-018-AC; 40 CFR 60.756(c)(1); Rules 62-210.200(PTE), 62-212.400 and 62-4.070 (3), F.A.C]
- 2. <u>Flare Design</u>: Unless otherwise indicated, the construction and operation of the flares shall be in accordance with the capacities and specifications stated in Application No. 0930104-014-AC and shall comply with the minimum requirements of 40 CFR 60.18 and 40 CFR 60, Subpart WWW. [Rule 62-210.300, F.A.C.]

PERFORMANCE RESTRICTIONS

- 3. Shutdown of Existing Flares: The permittee shall notify the Compliance Authority 7 days before each existing flares is shutdown and removed in accordance with the approved flare shutdown plan. This permit does not regulate existing flares while still in operation. The existing flares are regulated by the current Title V air permit. [Rule 62-4.070 (3) F.A.C]
- 4. Permitted Capacity: The maximum permitted capacities of the new flares are: 1,500 scfm of LFG for EU 008 and 3,000 scfm of LFG for EU 009, 010, 011 and 012. [Rule 62-210.200(PTE), F.A.C. and Rule 62-4.070 (3) F.A.C.]
- 5. Operation: The hours of operation of these emission units are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]
- 6. <u>Flare H₂S or TS Limits</u>: Only treated LFG containing no more than 200 ppmv of H₂S or 210 ppmv of TS on a 30 day rolling average shall be combusted in the flares. [Rules 62-4.070(3), 62-212.400 (BACT) and 62-210.200(PTE), F.A.C.]

REGULATIONS

7. NSPS Requirements: These emissions units are subject to 40 CFR 60.18: General Control Devices" (see Appendix CCD of this permit), other applicable sections of 40 CFR 60, Subpart A (See Appendix A of this permit), and applicable provisions of 40 CFR 60 Subpart WWW (see Appendix WWW of this permit). [Rules 62-204.800, 62-210.300, F.A.C., and 40 CFR 60 Subparts WWW and A]

SECTION III - EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION B. OPEN FLARES (EU 008, 009, 010, 011, and 012)

EMISSIONS STANDARDS

8. Visible Emissions (VE) Standard: The flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph 40 CFR 60.18 (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

[Rules 62-4.070 (3) and 62-212.400 (BACT), F.A.C. and 40 CFR 60.18]

TESTING AND MONITORING REQUIREMENTS

- 9. <u>VE Compliance Tests</u>: New open flares shall be tested to demonstrate initial compliance with the VE standard given in **Condition 8** above no later than 180 days after initial operation and during each federal fiscal year (October 1st to September 30th) thereafter. The EPA Method 22 VE compliance test shall be used to determine the compliance of the flares with the VE standard. [Rule 62-4.070(3), F.A.C.]
- 10. Continuous Monitoring Devices: Proper devices for the continuous monitoring and recording of the total LFG flow rate and flame presence at each flare, shall be installed prior to the collection and combustion of the LFG. Pursuant to 40 CFR 60.756(c), the permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:
 - (1) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
 - (2) A device that records flow to or bypass of the flare. The owner or operator shall either:
 - (i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
 - (ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.

[Rule 62-4.070 (3) F.A.C. and 40 CFR 60.756(c)]

- 11. Flame Presence Inspection Monitoring: Flares shall be operated with a flame present at all times as determined by the methods specified in 40 CFR 60.18(f). The permittee shall continuously monitor the presence of a flame with the flare operation. Pursuant to 40 CFR 60.758(c)(4), for each flare, the permittee shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60.756(c) and up-to-date readily accessible records of all periods of operation in which the flame or flare pilot flame is absent. [Rule 62-4.070 (3) F.A.C.; 40 CFR 60.18 and 40 CFR 60, Subpart WWW]
- 12. Flare Heat Content and Tip Velocity Specification: In accordance with 40 CFR 60.18(c)(3), for each open flare, the owner or operator of this facility shall select to adhere to the heat content specifications of 40 CFR 60.18(c)(3)(ii) or the maximum tip velocity specifications of 40 CFR 60.18(c)(4) or adhere to the requirements of 40 CFR 60.18(c)(3)(i). If the owner or operator decides to change the selected flare operating specification then the Compliance Authority shall be notified in writing within ten (10) calendar days of the change.
- Inspection and Maintenance of the Flares: The owner or operator shall conduct inspection and maintenance of the flares in accordance with the requirements of 40 CFR 60, Subpart WWW and 40 CFR 63, Subpart AAAA. [40 CFR 60, Subpart WWW and 40 CFR 63, Subpart AAAA]
- 14. Flare Startup, Shutdown and Malfunction Plan: In accordance with 40 CFR 60, Subpart WWW and 40 CFR 63, Subparts A and AAAA, a startup, shutdown and malfunction (SSM) plan shall be part of this facility. [40 CFR 63.6 (e)(3) and 40 CFR 63.1955(c)]
- 15. <u>Stack Test Requirements</u>: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION B. OPEN FLARES (EU 008, 009, 010, 011, and 012)

specified in Appendix CTR (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]

16. <u>Stack Test Methods</u>: Any required stack tests shall be performed in accordance with the following methods:

Method	Description of Method and Comments		
EPA 22	Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares, 2 Hour Duration		

- 17. Work Practice: Good combustion practices will be utilized at all times to ensure emissions from the flare system are minimized. Therefore, all operators shall be properly trained to operate and ensure maintenance of this system in accordance with the guidelines and procedures established by the manufacturer. The training shall include good operating practices as well as methods for minimizing excess emissions. [Rules 62-4.070(3) F.A.C.]
- 18. <u>LFG Flow Rate</u>: The permittee is required to record the total gas flow rate in scfm to each flare on a monthly average basis and measure the H₂S or TS content of the LFG on a 30 day rolling average basis, and report the flow rate and H₂S or TS results quarterly to the Compliance Authority. [Rule 62-4.070(3) F.A.C.]

RECORDS AND REPORTS

- 19. <u>Records:</u> The permittee shall maintain records pursuant to the requirements of 40 CFR 63, Subparts A and AAAA and 40 CFR 60, Subpart WWW.
- 20. <u>Test Reports</u>: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix CTR (Common Testing Requirements) of this permit. [Rule 62-297.310(8), F.A.C.]
- 21. Reporting Requirements: At least five (5) working days prior to the completion of construction of the source(s) authorized under this Permit, the owner/operator shall provide written notice to the Department's Southeast District Office of its intent to commence operation. The notice shall specify when the construction will be completed and when the facility owner or operator expects to commence operation. [Rules 62-4.070 (3) F.A.C.]
- 22. <u>Records and Reports</u>: The permittee shall maintain a record of any information required by this Permit. Such records shall be retained for a minimum of five (5) years and shall be made available to the Department upon request. [Rules 62-4.070 (3) F.A.C.]

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION C. SOLAR T-130 CTG (EU-013)

The Specific Conditions listed in this subsection apply to the following emission unit that is part of the LFGTE plant at the OL:

EU ID No.	Emission Units Description	
013	15 MW Solar Titan 130 (T-130) CTG	

EQUIPMENT

- 1. <u>CTG</u>: The permittee shall install, tune, operate and maintain a simple cycle CTG consisting of: one 15 MW LFG-fueled Solar T-130 CTG; an inlet air filtration system; one automated CTG control system; and one CTG stack. [Application No. 0930104-014-AC and Rule 62-4.070(3), F.A.C.]
- 2. <u>Circumvention</u>: The permittee shall not circumvent the air pollution control equipment, including any equipment integral to the CTG, or allow the emission of air pollutants without this equipment operating properly. [Rules 62-210.650 and Rule 62-4.070(3), F.A.C.]
- 3. Continuous Parameter Monitoring System (CPMS): Using the procedures described in §60.4340 and §60.4355, the permittee shall establish, document, install, calibrate, maintain and operate a CPMS based upon defined parameters indicative of the CTG NO_X formation characteristics, and monitor these parameters continuously. [Rules 62-4.070(3) and 62-212.400, F.A.C.; 40 CFR 60, Subpart KKKK]

PERFORMANCE RESTRICTIONS

- 3. <u>Authorized Fuels</u>: In accordance with the BACT determination, the only authorized fuel for use in the CTG is treated LFG containing no more than 200 ppmv of H₂S or 210 ppmv of TS as measured by a CFM on a 30 day rolling average basis.

 [Rules 62-4.070(3), 62-212.400 and 62-210.200(PTE), F.A.C.; 40 CFR 60, Subpart KKKK]
- 4. CTG Permitted Capacity: The design heat input rate of the CTG is 150 million British thermal units per hour (mmBtu/hr) on a 4 hour averaging time basis and based on the lower heating value (LHV) of the LFG. This rate is based on a compressor inlet temperature of 59 °F, International Organization for Standardization (ISO) conditions of the LFG. The heat input rate will vary depending upon CTG characteristics, ambient conditions, alternate methods of operation and evaporative cooling (if installed). The permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department.

 [Application No. 0930104-014-AC; and Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]
- 5. Operation: The hours of operation of this emission unit is not limited (8,760 hours per year). [Application No. 0930104-014-AC; and Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

NSPS APPLICABILITY

6. NSPS Subpart KKKK Applicability: The CTG is subject to all applicable requirements of 40 CFR 60, Subpart KKKK - Standards of Performance for Stationary Combustion Turbines which applies to combustion turbines and duct burners constructed after February 18, 2005. [Rule 62-204.800(7)(b), F.A.C. and 40 CFR 60.4300, NSPS - Subpart KKKK - Standards of Performance for Stationary Combustion Turbines (see Appendix KKKK)].

NESHAP APPLICABILITY

7. NESHAP Subpart YYYY Applicability: This facility is a major source of HAP. This CTG is potentially subject to 40 CFR 63, Subpart YYYY - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines. The applicability of this rule has been stayed for lean premix and diffusion flame gas-fired combustion turbines such as planned for this project. For the

SECTION III - EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION C. SOLAR T-130 CTG (EU-013)

applicable requirements of NESHAP, Subpart YYYY to this CTG see Appendix YYYY of this permit.

EMISSION LIMITS

8. Emission Standards: The following standards are at least as stringent as the Subpart KKKK limits described in Condition 6 above and in Appendix KKKK of this permit. Emissions from this CTG shall not exceed the following standards.

Pollutant	Method of Operation	Initial/Annual Stack Test 3-Run Average ^a		CPMS Based Averages ^g	
	-	ppmvd ^b	lb/hr ^f	ppmvd ^b	lb/hr ^f
СО	LFG	100	78.4	N/A	N/A
NO _x °	LFG	72	46.4	72 4-hour rolling average ^g	46.4 4-hour rolling average ^g
		N/A	2.8	N	/A
PM/PM ₁₀ d	LFG	200 ppmv H ₂ S or 210 ppmv TS in LFG on a 30-day basis (BACT)			day basis (BACT)
		Visible emissions shall not exceed 10% opacity for each 6-minute block average.			
SAM/SO ₂ ° LFG		200 ppmv	200 ppmv H ₂ S or 210 ppmv TS in LFG on a 30-day basis (BACT)		
0.15 lb SO ₂ /mmBtu (40 CFR 60, Subpart KKK)		

- a. All tests conducted at 90-100 percent (%) load.
- b. Parts per million by volume dry corrected to 15% oxygen.
- c. The initial and annual EPA Method 7E or Method 20 tests associated with demonstration of compliance with 40 CFR 60, Subpart KKKK shall be used to demonstrate compliance with the individual standards during the time of those tests. NO_X mass emission rates are defined as oxides of nitrogen expressed as nitrogen dioxide (NO₂). Continuous compliance with the 4-hour rolling average NO_X standards shall be demonstrated based on data collected by the required CPMS.
- d. After the initial compliance test the sulfur fuel specification combined with the efficient combustion design and operation of the CTG shall indicate compliance. Compliance with the fuel specifications and visible emissions standards shall serve as indicators of good combustion. Compliance with the fuel specifications shall be demonstrated by keeping records of the fuel sulfur content. Compliance with the visible emissions standard shall be demonstrated by conducting tests in accordance with EPA Method 9.
- e. The LFG H₂S or TS specification effectively limits the potential emissions of SAM and SO₂ from the CTG. Compliance with the LFG H₂S specification of 200 ppmv or 210 ppmv of TS shall be determined by-a CFM. Such representative LFG CFM data will insure-that the SO₂ emissions do not exceed the 0.15 lb SO₂/mmBtu heat input limitation of 40 CFR 60, Subpart KKKK provided the permittee follows the procedures given in 40 CFR 60.4415(a)(1)(ii).
- f. The mass emission rate standards are based on a turbine inlet condition of 59 °F. Mass emission rate may be adjusted to actual test conditions in accordance with the performance curves and/or equations on file with the Department.
- g. CPMS-based compliance shall be conducted in accordance with the 40 CFR 60, NSPS, Subpart KKKK for NO_X. [Application No. 0930104-014-AC; and Rules 62-4.070(3), 62-212.400 (BACT) and 62-210.200(PTE), F.A.C.]

EXCESS EMISSIONS

- 9. <u>Definitions Related to Excess Emissions</u>: Rule 62-210.200 (Definitions), F.A.C. defines the following terms.
 - a. Startup is defined as the commencement of operation of any emissions unit which has shut down or

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION C. SOLAR T-130 CTG (EU-013)

- ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
- b. Shutdown is the cessation of the operation of an emissions unit for any purpose.
- c. Mulfunction is defined as any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.
- 10. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CPM data. [Rule 62-210.700(4), F.A.C.]
- 11. Excess Emissions Calculations: The following conditions apply only to the SIP-based emissions standards specified above in this subsection. Rule 62-210.700, F.A.C. (Excess Emissions) cannot vary or supersede any federal NSPS or NESHAP. As provided by the authority in Rule 62-210.700(5), F.A.C., the following conditions supersede the provisions in Rule 62-210.700(1), F.A.C.
 - a. NO_X Emissions: Excess NO_X emissions based on a 4 hour rolling average standard shall be calculated in accordance with the NSPS Subpart KKKK provisions.

TEST METHODS AND PROCEDURES

- 12. <u>Initial Compliance Tests</u>: The CTG shall be tested to demonstrate initial compliance with the emissions standards for CO, NO_X, PM/PM₁₀ and opacity. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. The CTG shall demonstrate compliance with the NO_X standard in accordance with the methods specified in NSPS Subpart KKKK of 40 CFR 60. Compliance tests shall be performed in accordance with reference methods as described in 40 CFR 60, Appendix A and 40 CFR 51 Appendix M, adopted by reference in Chapter 62-204.800, F.A.C. [Rules 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]
- 13. <u>Annual Compliance Tests</u>: During each federal fiscal year (October 1st to September 30th), the CTG shall be tested to demonstrate compliance with the emissions standards for CO and opacity. The CTG shall demonstrate compliance with the NO_X standard in accordance with the methods specified in NSPS Subpart KKKK of 40 CFR 60. [Rule 62-297.310(7)(a)4, F.A.C.]
- 14. <u>Test Requirements</u>: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required 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.]
- 15. 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.		
7E	Determination of NO _X Emissions from Stationary Sources.		
9	Visual Determination of the Opacity of Emissions from Stationary Sources.		
10	Determination of CO Emissions from Stationary Sources. The method shall be based on a continuous sampling train.		
. 19	Determination of SO ₂ Removal Efficiency and PM, SO ₂ and NO _X 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.		

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]

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION C. SOLAR T-130 CTG (EU-013)

CONTINUOUS MONITORING REQUIREMENTS

16. Continuous Monitoring: The permittee shall install, calibrate, maintain and operate CPMS to measure and record the emissions of NO_X from the CTG in a manner sufficient to demonstrate continuous compliance with the NO_X emission standards of this section. The monitoring system shall be installed, calibrated and properly functioning within 60 calendar days of achieving permitted capacity as defined in Rule 62-297.310(2), F.A.C., but no later than 180 calendar days after initial startup and prior to the initial performance tests. Within one working day of discovering emissions in excess of the NO_X standard (and subject to the specified averaging period), the permittee shall notify the Compliance Authority.

OTHER MONITORING REQUIREMENTS

17. <u>LFG Flow Measurements</u>: The permittee shall install and maintain a device that measures the flow of LFG to the CTG. Total LFG flow to the CTG shall be continuously measured and recorded. [Rules 62-4.070 (3) F.A.C.]

RECORDS AND REPORTS

- 18. Monitoring of Capacity: The permittee shall monitor and record the operating rate of CTG on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown and malfunction). This shall be achieved through monitoring daily rates of consumption and heat content of the allowable fuel in accordance with the provisions of Appendix D in 40 CFR 75 and recording the data using a monitoring component of the CEMS system required above. [Rule 62-4.070(3), F.A.C. and 40 CFR 75]
 - {Permitting Note: While 40 CFR 75 deals with continuous emissions monitoring, including fuel monitoring, as part of the Acid Rain Program; this emission unit is not an acid rain unit. The provisions from Appendix D of 40 CFR 75 dealing with the LFG heat content and consumption rate are included for monitoring purposes only.}
- 19. Stack Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Compliance Authority on the results of each such test. The required test report shall be filed with the Compliance Authority 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 Compliance Authority to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report shall provide the applicable information specified in Rule 62-297.310(8), F.A.C. and summarized in Appendix CTR of this permit. [Rule 62-297.310(8), F.A.C.]

SECTION IV - EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION D. SOLAR T-40 CTG (EU-014, 015 AND 016)

The Specific Conditions listed in this subsection apply to the following emission units that are part of the LFGTE plant at the OL:

EU ID No.	Emission Units Description
014	3.5 MW Solar Centaur 40 (C-40) CTG
015	3.5 MW Solar Centaur 40 (C-40) CTG
016	3.5 MW Solar Centaur 40 (C-40) CTG

EQUIPMENT

- 1. <u>CTG</u>: The permittee shall install, tune, operate and maintain three simple cycle CTG consisting of: 3.5 MW LFG-fueled Solar C-40 CTG; inlet air filtration systems; automated CTG control systems; and CTG stack. [Application No. 0930104-014-AC and Rule 62-4.070(3), F.A.C.]
- 2. <u>Circumvention</u>: The permittee shall not circumvent the air pollution control equipment, including any equipment integral to the CTG, or allow the emission of air pollutants without this equipment operating properly. [Rules 62-210.650 and Rule 62-4.070(3), F.A.C.]

PERFORMANCE RESTRICTIONS

- 3. <u>Authorized Fuels</u>: In accordance with the BACT determination, the only authorized fuel for use in the CTG is treated LFG containing no more than 200 ppmv of H₂S or 210 ppmv of TS as measured by a CFM on a 30 day rolling average basis. [Rules 62-4.070(3), 62-212.400 and 62-210.200(PTE), F.A.C.; 40 CFR 60, Subpart KKKK]
- 4. CTG Permitted Capacity: The design heat input rate of each CTG is 45 mmBtu/hr (4 hour averaging time basis) based on lower heating value (LHV) of the LFG. This rate is based on a compressor inlet temperature of 59 °F, International Organization for Standardization (ISO) conditions. The heat input rate will vary depending upon combustion turbine characteristics, ambient conditions, alternate methods of operation and evaporative cooling. The permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department.
- 5. Operation: The hours of operation of these EUs are not limited (8,760 hours per year). [Application No. 0930104-014-AC; and Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

NSPS APPLICABILITY

6. NSPS Subpart KKKK Applicability: These CTG are subject to all applicable requirements of 40 CFR 60, Subpart KKKK - Standards of Performance for Stationary Combustion Turbines which applies to combustion turbines and duct burners constructed after February 18, 2005.

[Rule 62-204.800(7)(b), F.A.C. and 40 CFR 60.4300, NSPS - Subpart KKKK - Standards of Performance for Stationary Combustion Turbines (see Appendix KKKK)]

NESHAP APPLICABILITY

7. NESHAP Subpart YYYY Applicability: This facility is a major source of HAP. These CTG are potentially subject to 40 CFR 63, Subpart YYYY - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines. The applicability of this rule has been stayed for lean premix and diffusion flame gas-fired combustion turbines such as planned for this project. For the applicable requirements of NESHAP, Subpart YYYY to these CTG see Appendix YYYY of this permit.

SECTION IV - EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION D. SOLAR T-40 CTG (EU-014, 015 AND 016)

EMISSION LIMITS

8. <u>Emission Standards</u>: The following standards are at least as stringent as the Subpart KKKK limits described in **Condition 6** above and in Appendix KKKK of this permit. Emissions from each of these CTG shall not exceed the following standards.

Bellutant Method of		Initial/Annual Stack Test 3-Run Average ^a		
Pollutant	Operation	ppmvd ^b	lb/hr °	
СО	LFG	250	28.6	
NO _X d	LFG	42	7.9	
		N/A	2.8	
PM/PM ₁₀ e	LFG	200 ppmv H ₂ S or 210 ppmv TS in LFG on a 30-day basis (BACT)		
Visible emissions shall not exceed 10% opacity for each 6-minute blo		pacity for each 6-minute block average.		
SAM/SO ₂ f LFG		200 ppmv H ₂ S or 210 ppmv TS in LFG on a 30-day basis (BACT)		
3AIVI/3U2	LFG	0.15 lb SO ₂ /mmBtu (40 CFR 60, Subpart KKKK)		

- a. All tests conducted at 100 percent (%) load.
- b. Parts per million by volume dry corrected to 15% oxygen
- c. The mass emission rate standards are based on a turbine inlet condition of 59 °F. Mass emission rate may be adjusted to actual test conditions in accordance with the performance curves and/or equations on file with the Department.
- d. The initial and annual EPA Method 7E or Method 20 tests shall be used to demonstrate compliance.
- e. After the initial compliance test the sulfur fuel specification combined with the efficient combustion design and operation of each CTG shall indicate compliance. Compliance with the fuel specifications and visible emissions standards shall serve as indicators of good combustion. Compliance with the fuel specifications shall be demonstrated by keeping records of the fuel sulfur content. Compliance with the visible emissions standard shall be demonstrated by conducting tests in accordance with EPA Method 9.
- f. The LFG H₂S or TS specification effectively limits the potential emissions of SAM and SO₂ from the CTG. Compliance with the LFG H₂S specification of 200 ppmv or 210 ppmv of TS shall be determined by a CFM. Such representative LFG CFM data will insure-that the SO₂ emissions do not exceed the 0.15 lb SO₂/mmBtu heat input limitation of 40 CFR 60, Subpart KKKK provided the permittee follows the procedures given in 40 CFR 60.4415(a)(1)(ii).

[Application No. 0930104-014-AC; and Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EXCESS EMISSIONS

- 9. <u>Definitions Related to Excess Emissions</u>: Rule 62-210.200(Definitions), F.A.C. defines the following terms.
 - a. Startup is defined as the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
 - b. Shutdown is the cessation of the operation of an emissions unit for any purpose.
 - c. Malfunction is defined as any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.
- 10. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any

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compliance determinations based on CEMS data. [Rule 62-210.700(4), F.A.C.]

TEST METHODS AND PROCEDURES

- 11. <u>Initial Compliance Tests</u>: Each CTG shall be tested to demonstrate initial compliance with the emissions standards for CO, NO_X, PM/PM₁₀ and opacity. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. Each CTG shall demonstrate compliance with the NO_X standard in accordance with the methods specified in NSPS Subpart KKKK of 40 CFR 60. Compliance tests shall be performed in accordance with reference methods as described in 40 CFR 60, Appendix A and 40 CFR 51 Appendix M, adopted by reference in Chapter 62-204.800, F.A.C. [Rules 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]
- 12. <u>Annual Compliance Tests</u>: During each federal fiscal year (October 1st to September 30th), each CTG shall be tested to demonstrate compliance with the emissions standards for NO_X, CO and opacity. Each CTG shall demonstrate compliance with the NO_X standard in accordance with the methods specified in NSPS Subpart KKKK of 40 CFR 60. [Rule 62-297.310(7)(a)4, F.A.C.]
- 13. <u>Test Requirements</u>: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required 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.]
- 14. 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.
7E	Determination of NO _X Emissions from Stationary Sources.
9	Visual Determination of the Opacity of Emissions from Stationary Sources.
10	Determination of CO Emissions from Stationary Sources. The method shall be based on a continuous sampling train.
19	Determination of SO ₂ Removal Efficiency and PM, SO ₂ and NO _X 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.

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].

MONITORING REQUIREMENTS

15. <u>LFG Flow Measurements</u>: The permittee shall install and maintain a device that measures the flow of LFG to the CTG. Total LFG flow to the CTG shall be continuously measured and recorded. The LFG flow may be monitored at only one location if monitoring at this location accurately represents the total flow of LFG being combusted in all the CTG. The applicant shall notify the Compliance Authority of the monitoring device location 90 days before installation. [Rules 62-4.070 (3) F.A.C.]

RECORDS AND REPORTS

16. Monitoring of Capacity: The permittee shall monitor and record the operating rate of each CTG on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown and malfunction). This shall be achieved through monitoring daily rates of consumption and heat content of the allowable fuel in accordance with the provisions of Appendix D in 40 CFR 75 and recording the data using a monitoring component of the CEMS system required above. [Rule 62-4.070(3), F.A.C. and 40 CFR 75]

{Permitting Note: While 40 CFR 75 deals with continuous emissions monitoring, including fuel

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- monitoring, as part of the Acid Rain Program; this emission unit is not an acid rain unit. The provisions from Appendix D of 40 CFR 75 dealing with the LFG heat content and consumption rate are included for monitoring purposes only.}
- 17. Stack Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Compliance Authority on the results of each such test. The required test report shall be filed with the Compliance Authority 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 Compliance Authority to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report shall provide the applicable information specified in Rule 62-297.310(8), F.A.C. and summarized in Appendix CTR of this permit. [Rule 62-297.310(8), F.A.C.]

SECTION IV. APPENDICES

CONTENTS

Appendix A: NSPS, Subpart A and NESHAP, Subpart A - Identification of General Provisions.

Appendix AAAA: NESHAP, Subpart AAAA for Municipal Solid Waste Landfills.

Appendix CC: Common Conditions.

Appendix CCD: Common Control Devices – Flares.

Appendix CF: Citation Formats and Glossary of Common Terms.

Appendix CTR: Common Testing Requirements.

Appendix GC: General Conditions.

Appendix H₂S: Protocol for Daily Sampling to Measure H₂S Concentration in LFG.

Appendix KKKK: NSPS, Subpart KKKK Requirements for Gas Turbines and Duct Burners.

Appendix SC: Standard Conditions.

Appendix WWW: NSPS, Subpart WWW for Municipal Solid Waste Landfills.

Appendix YYYY: NESHAP, Subpart YYYY Requirements for Gas Turbines.

SECTION IV. APPENDIX A

NSPS SUBPART A AND NESHAP SUBPART A - IDENTIFICATION OF GENERAL PROVISIONS

The provisions of this Subpart may be provided in full upon request. Emissions units subject to a New Source Performance Standard of 40 CFR 60 are also subject to the applicable requirements of Subpart A, the General Provisions, including:

- § 60.1 Applicability.
- § 60.2 Definitions.
- § 60.3 Units and abbreviations.
- § 60.4 Address.
- § 60.5 Determination of construction or modification.
- § 60.6 Review of plans.
- § 60.7 Notification and Record Keeping.
- § 60.8 Performance Tests.
- § 60.9 Availability of information.
- § 60.10 State Authority.
- § 60.11 Compliance with Standards and Maintenance Requirements.
- § 60.12 Circumvention.
- § 60.13 Monitoring Requirements.
- § 60.14 Modification.
- § 60.15 Reconstruction.
- § 60.16 Priority List.
- § 60.17 Incorporations by Reference.
- § 60.18 General Control Device Requirements.
- § 60.19 General Notification and Reporting Requirements.

Individual subparts may exempt specific equipment or processes from some or all of these requirements. The general provisions may be provided in full upon request.

NESHAP - SUBPART A, IDENTIFICATION OF GENERAL PROVISIONS

The provisions of this Subpart may be provided in full upon request. Emissions units subject to a National Emission Standards for Hazardous Air Pollutants of 40 CFR 63 are also subject to the applicable requirements of Subpart A, the General Provisions, including:

- § 63.1 Applicability.
- § 63.2 Definitions.
- § 63.3 Units and abbreviations.
- § 63.4 Prohibited Activities and Circumvention.
- § 63.5 Preconstruction Review and Notification Requirements.
- § 63.6 Compliance with Standards and Maintenance Requirements.

SECTION IV. APPENDIX A

NSPS SUBPART A AND NESHAP SUBPART A - IDENTIFICATION OF GENERAL PROVISIONS

- § 63.7 Performance Testing Requirements.
- § 63.8 Monitoring Requirements.
- § 63.9 Notification Requirements.
- § 63.10 Recordkeeping and Reporting Requirements.
- § 63.11 Control Device Requirements.
- § 63.12 State Authority and Delegations.
- § 63.13 Addresses of State Air Pollution Control Agencies and EPA Regional Offices.
- § 63.14 Incorporation by Reference.
- § 63.15 Availability of Information and Confidentiality.

Individual subparts may exempt specific equipment or processes from some or all of these requirements. The general provisions may be provided in full upon request.

SECTION IV. APPENDIX AAAA

NESHAP, SUBPART AAAA FOR MUNICIPAL SOLID WASTE LANDFILLS

The OL is subject to the applicable requirements of NESHAP Subpart AAAA for Municipal Solid Waste Landfills. Below is a link to Subpart AAAA.

NESHAP, Subpart AAAA

SECTION IV. APPENDIX CC

COMMON CONDITIONS

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the OL.

Emissions and Controls

- 1. Plant Operation Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
- 2. <u>Circumvention</u>: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
- 3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700(Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]
- 4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
- 5. Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
- 6. <u>VOC or OS Emissions</u>: No person shall 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. [Rule 62-296.320(1), F.A.C.]
- 7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.

 [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.]
- 8. <u>General Visible Emissions</u>: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
- 9. <u>Unconfined Particulate Emissions</u>: 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. During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing

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techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

Records and Reports

10. <u>Records Retention</u>: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]

11. Emissions Computation and Reporting

- a. Applicability. This rule sets forth required methodologies to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit.
- b. Computation of Emissions. For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.
 - (1) Basic Approach. The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
 - (a) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.
 - (b) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
 - (c) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
 - (2) Continuous Emissions Monitoring System (CEMS).
 - (a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:

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- 1) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or
- 2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
- (b) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
 - 1) A calibrated flow meter that records data on a continuous basis, if available; or
 - 2) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
- (c) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.
- (3) Mass Balance Calculations.
 - (a) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
 - 1) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and
 - 2) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
 - (b) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.
 - (c) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.
- (4) Emission Factors.
 - a. An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.
 - 1) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests

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- conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
- 2) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
- 3) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
- b. If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.
- (5) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
- (6) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.
- (7) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.
- (8) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.
- c. Annual Operating Report for Air Pollutant Emitting Facility
 - (1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:
 - (a) All Title V sources.
 - (b) All synthetic non-Title V sources.
 - (c) All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.
 - (d) All facilities for which an annual operating report is required by rule or permit.
 - (2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.

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- (3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year.
- (4) Beginning with 2007 annual emissions, emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.

[Rule 62-210.370, F.A.C.]

COMMON CONTROL DEVICES - FLARES

60.18 General control device requirements.

- (a) <u>Introduction</u>. This section contains requirements for control devices used to comply with applicable subparts of parts 60 and 61. The requirements are placed here for administrative convenience and only apply to facilities covered by subparts referring to this section.
- (b) Flares. Paragraphs (c) through (f) apply to flares.
- (c) (1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
 - (2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).
 - (3) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f).
 - (4) (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (b)(4) (ii) and (iii).
 - (ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).
 - (iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity, Vmax, as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.
 - (5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, Vmax, as determined by the method specified in paragraph (f)(6).
 - (6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.
- (d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.
- (e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.
- (f) (1) Reference Method 22 shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.
 - (2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
 - (3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^n C_i H_i$$

where:

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COMMON CONTROL DEVICES - FLARES

- H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;
- K = Constant as defined as:

$$1.740 \times 10^{-7} \left(\frac{1}{ppm} \right) \left(\frac{gmole}{scm} \right) \left(\frac{MJ}{kcal} \right)$$

where the standard temperature for (gmole/scm) is 20°C;

- C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946–77 (Incorporated by reference as specified in § 60.17); and
- H_i =Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 (incorporated by reference as specified in § 60.17) if published values are not available or cannot be calculated.
- (4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.
- (5) The maximum permitted velocity, V_{max}, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.

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

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

28.8 = Constant

31.7 = Constant

 H_T = The net heating value as determined in paragraph (f)(3).

(6) The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation.

 $V_{max} = 8.706 + 0.7084 (H_T)$

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

8.706 = Constant

0.7084 = Constant

 H_T = The net heating value as determined in paragraph (f)(3).

CITATION FORMATS AND GLOSSARY OF COMMON TERMS

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit

"AO" identifies the permit as an Air Operation Permit

"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located

"2222" represents the specific facility ID number for that county

"001" identifies the specific permit project number

"AC" identifies the permit as an air construction permit

"AF" identifies the permit as a minor source federally enforceable state operation permit

"AO" identifies the permit as a minor source air operation permit

"AV" identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the preconstruction review requirements of the Prevention of

Significant Deterioration of Air Quality

"FL" means that the permit was issued by the State of Florida

"317" identifies the specific permit project number

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

• F: degrees Fahrenheit Btu: British thermal units

acfm: actual cubic feet per minute CAM: compliance assurance monitoring

ARMS: Air Resource Management System CEMS: continuous emissions monitoring system

(Department's database) cfm: cubic feet per minute

BACT: best available control technology

Okeechobee Landfill, Inc.

DEP File No. 0930104-018-AC (PSD-FL-382A)

Landfill Gas to Energy Project Permit Modification

Okeechobee County

CITATION FORMATS AND GLOSSARY OF COMMON TERMS

CFR: Code of Federal Regulations

CO: carbon monoxide

COMS: continuous opacity monitoring system

DEP: Department of Environmental Protection

Department: Department of Environmental

Protection

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

ESP: electrostatic precipitator (control system for

reducing particulate matter)

EU: emissions unit

F.A.C.: Florida Administrative Code

F.D.: forced draft

F.S.: Florida Statutes

FGR: flue gas recirculation

F: fluoride

ft2: square feet

ft3: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury

I.D.: induced draft

ID: identification

kPa: kilopascals

lb: pound

MACT: maximum achievable technology

MMBtu: million British thermal units

MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for

Hazardous Air Pollutants

NO_X: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O₂: oxygen

Pb: lead

PM: particulate matter

PM₁₀: particulate matter with a mean aerodynamic

diameter of 10 microns or less

PSD: prevention of signifi9cant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

SAM: sulfuric acid mist **scf**: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen

oxides)

SO₂: sulfur dioxide

TPH: tons per hour

TPY: tons per year

UTM: Universal Transverse Mercator coordinate

system

VE: visible emissions

VOC: volatile organic compounds

Okeechobee Landfill, Inc.

Landfill Gas to Energy Project Permit Modification

DEP File No. 0930104-018-AC (PSD-FL-382A)

Okeechobee County

COMMON TESTING REQUIREMENTS

Unless otherwise specified in the permit, the following testing requirements apply to all emissions units at the OL.

Compliance Testing Requirements

- 1. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate 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. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]
- 2. Applicable Test Procedures Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

[Rule 62-297.310(4), F.A.C.]

- 3. Determination of Process Variables
- a. Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

- 4. <u>Frequency of Compliance Tests</u>: The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
 - a. General Compliance Testing.

COMMON TESTING REQUIREMENTS

- 1. The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.
- 2. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision.

In renewing an air operation permit pursuant to sub-subparagraph 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

- (a) Did not operate; or
- (b) In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours,
- 3. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for visible emissions, if there is an applicable standard.
- 4. The owner or operator shall notify the Department, 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 test conducted for the owner or operator.
- b. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

[Rule 62-297.310(7), F.A.C.]

Records and Reports

- 5. <u>Test Reports</u>: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. 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 shall provide the following information.
 - a. The type, location, and designation of the emissions unit tested.
 - b. The facility at which the emissions unit is located.
 - c. The owner or operator of the emissions unit.
 - d. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - e. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.

COMMON TESTING REQUIREMENTS

- f. The date, starting time and end time of the observation.
- g. The test procedures used.
- h. The names of individuals who furnished the process variable data, conducted the test, and prepared the report.
- i. The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.
- j. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

- 1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - a. Have access to and copy and records that must be kept under the conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

GENERAL CONDITIONS

- 9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- 10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- 11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
 - a. Determination of Best Available Control Technology (X);
 - b. Determination of Prevention of Significant Deterioration (X);
 - c. Compliance with National Emission Standards for Hazardous Air Pollutants (X); and
 - d. Compliance with New Source Performance Standards (X).
- 14. 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 or 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:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The person responsible for performing the sampling or measurements;
 - 3) The dates analyses were performed;
 - 4) The person responsible for performing the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) The results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

PROTOCOL FOR DAILY SAMPLING TO MEASURE H2S CONCENTRATION IN LFG

The purpose of this protocol is to facilitate the daily hydrogen sulfide monitoring of the gas desulphurization plant (GDP) at OLI. The following test methods and procedures for hydrogen sulfide sampling shall be used to meet the Landfill's air permit requirements. The use of Drager tubes for hydrogen sulfide sampling on a daily basis allows for a consistent method of sampling to be used to ensure compliance with the outlet concentration limits at OLI.

Sampling Equipment

The following equipment (or equivalent) will be used on a daily basis.

- Drager Hand Pump Model Accuro SKC Item # 800-64000, or equivalent.
- Hydrogen Sulfide Drager Tubes 100 to 2000 ppmv range SKC Item # 800-2910.
- 3-Liter Tedlar Bag.
- Plastic Tubing.

Equipment Requirements

This sampling protocol assumes that the technician performing the monitoring has read and is familiar with all of the necessary manufacturer's information on the operation, care, and storage of the required equipment.

- All Hydrogen Sulfide Drager tubes shall be used only one time and disposed of after the data is recorded on the monitoring forms. All other sampling equipment may be utilized repeatedly until such time as the equipment needs repair or replacement.
- Each box of Hydrogen Sulfide Drager tubes is stamped with an expiration date. The tubes are suitable for use through the last day of the month of expiration. Tubes beyond the expiration date cannot be relied upon to give accurate results, and should not be used for sampling.
- The recommended operating and storage temperatures for the Drager hand pump are a minimum temperature of -4 deg F and a maximum temperature of 122 deg F. It is also recommended that the Drager hand pump be operated and stored in humidity less than 95%.
- Hydrogen Sulfide Drager tubes should be stored in their original package at room temperature. As noted on each package the maximum storage temperature is 77 deg F. It is also recommended that during storage, excessively low (less than 35 deg F) or high (greater than 77 deg F) temperatures are avoided to maintain accuracy of the tube indication.
- Do not subject the Hydrogen Sulfide Drager tubes to light for prolonged periods.

Calibration Procedure

Calibration of the Drager pump should be conducted once per week (every 7 calendar days). Completion of the calibration procedures should be documented in the "Notes" section of the monitoring form. The "pump leak test" is the calibration procedure to be conducted. To conduct the "pump leak test" the following steps should be followed:

- 1. Insert an unopened Hydrogen Sulfide Drager tube into the hand pump socket.
- 2. Squeeze the hand pump completely and release.
- 3. The hand pump is adequately leak-proof if the end-of-stroke indicator on the hand pump has not appeared after 15 minutes.

SECTION IV. APPENDIX H₂S

PROTOCOL FOR DAILY SAMPLING TO MEASURE H2S CONCENTRATION IN LFG

- 4. Remove the unopened Hydrogen Sulfide Drager tube from the hand pump socket.
- 5. Press the stroke counter reset button on the hand pump to reset the stroke counter to zero.

If the hand pump does not pass the "pump leak test", the manufacturer's recommendations for service and repair should be followed.

Monitoring Requirements

- This sampling protocol does not require special training or certifications to perform. The sampler(s) should be familiar with the Drager pump, Drager tubes, and Tedlar bags and have read all necessary manufacturers information on the operation, care, and storage of the above equipment.
- The sampler(s) should be familiar with all site-specific health and safety protocols and should be familiar and experienced with safe handling of landfill gas.
- Monitoring will be performed daily, which is defined as one time in every 24 hour period beginning at 12:00AM to 11:59PM, Monday to Saturday.
- Monitoring should not be conducted when the ambient temperatures are less than 32 deg F and greater than 104 deg F. Should the ambient air temperatures exceed these limits, a gas sample should be obtained in a Tedlar bag and transported to an alternate suitable area (i.e., inside maintenance shop, under shaded roof, etc.) to perform the Drager testing.
- A landfill gas sampling port located in the gas piping on the outlet of the gas blowers will be used to obtain the gas samples. The port will be designated by OLI and will be used for all hydrogen sulfide sampling for consistency.

Sampling Procedure

The following sampling procedure will be used to determine the hydrogen sulfide concentration in the landfill gas at the Berman Road Landfill on a daily basis.

- 1. A 3-liter Tedlar bag will be connected to the sample port with plastic tubing and allowed to fill with landfill gas from the gas piping. The bag will be filled to approximately 80% capacity. The bag will be disconnected from the sample port and deflated to flush the Tedlar bag. The flushing process will be performed twice. The filling process will be repeated a third time and the Tedlar bag valve will be closed to retain the third gas sample.
- 2. The Drager hand pump should be prepared with a new Hydrogen Sulfide Drager tube (100-2000 ppmv range). The tip of the Hydrogen Sulfide Drager tube will be opened using the tube opener on the hand pump. Both ends of the tube should be opened in the same way.
- 3. Insert the Hydrogen Sulfide Drager tube (now open at both ends) into the hand pump. The arrow must point towards the pump.
- 4. The Drager hand pump will be connected to the Tedlar bag and the valve on the Tedlar bag will be opened. The Drager hand pump will be depressed until it stops. The Drager hand pump will be released until its bellows are fully expanded. Only when the end-of-stroke indicator on the Drager hand pump appears can the pump be squeezed again. This process will be continued until the number on the stroke counter corresponds to the number of strokes indicated on the Hydrogen Sulfide Drager tubes (typically for Hydrogen Sulfide Drager tubes this is one (1) pump of the Drager hand pump).

PROTOCOL FOR DAILY SAMPLING TO MEASURE H2S CONCENTRATION IN LFG

- 5. The hydrogen sulfide concentration indicated by Hydrogen Sulfide Drager tube will be recorded on the monitoring form. Approximately 30 seconds should elapse after the sample is taken prior to recording the hydrogen sulfide concentration on the monitoring form.
- 6. The valve on the Tedlar bag should be closed, and the bag should be removed. The used Hydrogen Sulfide Drager tube should be removed from the socket of the Drager hand pump. The Drager hand pump should be flushed with a few pump strokes of clean air.
- 7. A new Hydrogen Sulfide Drager tube and the Tedlar bag will be reattached. A second Drager tube reading will be performed on the Tedlar bag sample following Steps 1 through 6 above, and the results recorded on the monitoring form.
- 8. The average of the two hydrogen sulfide concentrations recorded from the Drager tube readings will be calculated and recorded on the monitoring form as the Average Daily Hydrogen Sulfide Concentration.

Should the daily H₂S monitoring not be performed due to extreme meteorological conditions (i.e., hurricane, lightening storms, heat, etc), risk of personnel safety, Acts of War or Terrorism, or other reasonable events that would prevent a daily H₂S reading, the H₂S concentrations from the last day before and the next day after the missed day(s) shall be averaged and used for the missing daily H₂S concentrations.

Hydrogen Sulfide Daily Monitoring Form

The Hydrogen Sulfide Daily Monitoring Form required for completion on a daily basis as part of the sampling is attached. The form will be used to log the basic sampling data, including sampler name, sampling time, and the meteorological conditions at the time of sampling. Completed Hydrogen Sulfide Daily Monitoring Forms will be maintained at the Berman Road Landfill for a period of five (5) years. These completed forms will be available for review by regulatory officials upon request.

SECTION IV. APPENDIX H₂S

PROTOCOL FOR DAILY SAMPLING TO MEASURE H₂S CONCENTRATION IN LFG

HYDROGEN SULFIDE DAILY MONITORING FORM

BERMAN ROAD LANDFILL - OKEECHOBEE, FLORIDA

Time:

Weather Conditions				
General Conditions:				
Wind Direction:	Wind Speed:			
Temperature (°F):	Pressure:			
H ₂ S	Sampling:			
Sample 1 Concentration (ppmv):	— <u>-</u>			
Sample 2 Concentration (ppmv):	· · · · · · · · · · · · · · · · · · ·			
Average H2S Concentration (ppmv):	· 			
Notes:				
<u>.</u>				
<u> </u>				
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SECTION IV. APPENDIX KKKK

NSPS SUBPART KKKK REQUIREMENTS FOR GAS TURBINES

All the OL Solar CTG shall comply with all applicable requirements of 40 CFR 60, Subpart KKKK-- Standards of Performance for Stationary Combustion Turbines.

The full provisions may be accessed at the below web link:

Link to Subpart KKKK

Table I is a listing of the NO_X limits from Subpart KKKK that apply to the OL LFGCP simple cycle CTG.

Table 1. NO_X Emission Limits for New Stationary Combustion Turbines¹. Subpart KKKK of Part 60.

CT Type	CT Heat Input at Peak Load (HHV)	NO _X Emission Standard
New turbine firing fuels other than natural gas	<50 MMBtu/hour	42 ppmvd² at 15% oxygen
New turbine firing fuels other than natural gas	> 50 MMBtu/hour and ≤ 850 MMBtu/hour	74 ppmvd ³ at 15% oxygen

- 1. Only the portion of the table that includes the NO_X requirements applicable to the OL LFGCP CTG.
- 2. NO_X emission standard on a 4-hour block average basis that applies to Solar Centaur Model C-40 (3.5 MW) CTG.
- 3. NO_X emission standard on a 4-hour block average basis that applies to Solar Titian Model T-130 (15 MW) CTG.

STANDARD CONDITIONS

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at OL.

EMISSIONS AND CONTROLS

- 1. Plant Operation Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
- 2. <u>Circumvention</u>: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
- 3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- 4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
- 5. Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permitee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
- 6. <u>VOC or OS Emissions</u>: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
- 7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and62-210.200(203), F.A.C.]
- 8. <u>General Visible Emissions</u>: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]
- 9. <u>Unconfined Particulate Emissions</u>: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

TESTING REQUIREMENTS

10. <u>Required Number of Test Runs</u>: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the

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STANDARD CONDITIONS

stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

- 11. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating 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 maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate 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.]
- 12. <u>Calculation of Emission Rate</u>: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
- 13. <u>Test Procedures</u>: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
 - a. Required Sampling Time. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
 - b. Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - c. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

[Rule 62-297.310(4), F.A.C.]

14. Determination of Process Variables

- c. Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- d. Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

STANDARD CONDITIONS

[Rule 62-297.310(5), F.A.C.]

- 15. <u>Sampling Facilities</u>: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.
- 16. <u>Test Notification</u>: The owner or operator shall notify the Department, 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 test conducted for the owner or operator. [Rule 62-297.310(7)(a)9, F.A.C.]
- 17. <u>Special Compliance Tests</u>: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
- 18. <u>Test Reports</u>: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. 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 or DEP Method 9 test, shall provide the following information:
 - 1) The type, location, and designation of the emissions unit tested.
 - 2) The facility at which the emissions unit is located.
 - 3) The owner or operator of the emissions unit.
 - 4) The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5) The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6) The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7) A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8) The date, starting time and duration of each sampling run.
 - 9) The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10) The number of points sampled and configuration and location of the sampling plane.
 - 11) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12) The type, manufacturer and configuration of the sampling equipment used.
 - 13) Data related to the required calibration of the test equipment.
 - 14) Data on the identification, processing and weights of all filters used.

STANDARD CONDITIONS

- 15) Data on the types and amounts of any chemical solutions used.
- 16) Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18) All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19) The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20) The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21) A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

RECORDS AND REPORTS

- 19. <u>Records Retention</u>: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
- 20. <u>Annual Operating Report</u>: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

SECTION IV. APPENDIX WWW

NSPS SUBPART WWW FOR MUNICIPAL SOLID WASTE LANDFILLS

The OL is subject to the applicable requirements of NSPS Subpart WWW for Municipal Solid Waste Landfills. Below is a web link to Subpart WWW.

NSPS, Subpart WWW

SECTION IV. APPENDIX YYYY

NESHAP SUBPART YYYY REQUIREMENTS FOR GAS TURBINES

All the CTG at the OL are subject to the applicable requirements of 40 CFR 63, Subpart YYYY for gas turbines. The provisions of this Subpart may be provided in full upon request.

Staying of the Rule

On August 18, 2004, EPA stayed the effectiveness of 40 CFR 63, Subpart YYYY for lean premix gas turbines such as those proposed for the West County Project. Following is the change in 40 CFR 63 that stays effectiveness:

§ 63.6095(d) Stay of standards for gas-fired subcategories.

If you start up a new or reconstructed stationary combustion turbine that is a lean premix gas-fired stationary combustion turbine or diffusion flame gas-fired stationary combustion turbine as defined by this subpart, you must comply with the Initial Notification requirements set forth in Sec. 63.6145 but need not comply with any other requirement of this subpart until EPA takes final action to require compliance and publishes a document in the Federal Register.

Requirements

The applicable requirements in Subpart YYYY are:

- § 63.6145 What notifications must I submit and when?
- (a) You must submit all of the notifications in §§ 63.7(b) and (c), 63.8(e), 63.8(f)(4), and 63.9(b) and (h) that apply to you by the dates specified.
- (b) As specified in § 63.9(b)(2), if you start up your new or reconstructed stationary combustion turbine before March 5, 2004, you must submit an Initial Notification not later than 120 calendar days after March 5, 2004.
- (c) As specified in § 63.9(b), if you start up your new or reconstructed stationary combustion turbine on or after March 5, 2004, you must submit an Initial Notification not later than 120 calendar days after you become subject to this subpart.
- (d) If you are required to submit an Initial Notification but are otherwise not affected by the emission limitation requirements of this subpart, in accordance with § 63.6090(b), your notification must include the information in § 63.9(b)(2)(i) through (v) and a statement that your new or reconstructed stationary combustion turbine has no additional emission limitation requirements and must explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary combustion turbine).
- (e) If you are required to conduct an initial performance test, you must submit a notification of intent to conduct an initial performance test at least 60 calendar days before the initial performance test is scheduled to begin as required in § 63.7(b)(1).
- (f) If you are required to comply with the emission limitation for formaldehyde, you must submit a Notification of Compliance Status according to § 63.9(h)(2)(ii). For each performance test required to demonstrate compliance with the emission limitation for formaldehyde, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test.

[Rules 62-4.070(3) and 62-204.800, F.A.C.; Subparts A and YYYY in 40 CFR 63]

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Chapman, Heather on behalf of Crandall, Lea

Sent:

Tuesday, July 19, 2011 4:29 PM

To:

Scearce, Lynn

Subject:

RE: Okeechobee Landfill Gas Permit # 0930104-018-AC-(PSD-FL-382A)

Lynn -

OGC has not received any comments, extensions or petitions on this permit. Please let me know if you need anything else.

Heather

From: Scearce, Lynn

Sent: Tuesday, July 19, 2011 2:46 PM

To: Crandall, Lea

Subject: Okeechobee Landfill Gas Permit # 0930104-018-AC-(PSD-FL-382A)

Hello Lea,

The 30-day public comment period has ended for this project.

Did OGC receive any comments, extensions or petitions?

Thank you for checking.

Lynn

Florida Department of Environmental Protection

To:

Jeff Koerner

Through:

Al Linero

From:

Teresa Heron 1.

Date:

July 19, 2011

Subject:

· Revised Draft Permit No. 0930104-018-AC (PSD-FL-382A)

Okeechobee Landfill Gas (LFG) to Energy Project Permit Modification

Attached for your review is the final PSD air construction permit modification package for the LFG to energy project at the Waste Management Okeechobee Landfill.

On October 12, 2010, the applicant submitted an application to make some changes previously requested during the comment period for Permit PSD-FL-382 (issued on April 19, 2010).

After a response to the Department incompleteness letter in January 2011 and several interactions with the applicant, the Department mailed out the Public Notice on April 6, 2011. OLI did not publish the Public Notice and elected to submit two different Requests for Extension of Time (the last one until June 2, 2011) in order to negotiate with the Department the Draft permit.

On June 20, 2011 (day 72), the Permitting Authority gave a revised Notice of its Intent to Issue an Air Permit to the applicant. This Notice was published on June 29, 2011. No comments were received from the applicant, consultant, government agencies or the public

We recommend your approval of the attached final permit modification package.

Attachments

JFK/aal/tmh

From:

Microsoft Exchange

To:

dee_morse@nps.gov

Sent:

Wednesday, July 20, 2011 2:19 PM

Subject:

Relayed: Okeechobee Landfill, # 0930104-018-AC-(PSD-FL-382A), Final Permit

Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:

dee morse@nps.gov

Subject: Okeechobee Landfill, # 0930104-018-AC-(PSD-FL-382A), Final Permit

Sent by Microsoft Exchange Server 2007

Buff, Dave [DBuff@GOLDER.com] From:

To: Scearce, Lynn

Sent:

Wednesday, July 20, 2011 2:27 PM Read: Okeechobee Landfill, # 0930104-018-AC-(PSD-FL-382A), Final Permit Subject:

Your message was read on Wednesday, July 20, 2011 2:26:51 PM (GMT-05:00) Eastern Time (US & Canada).

From:

Hawkins, Tim [THawkins@wm.com]

To:

Sent:

Subject:

Scearce, Lynn
Wednesday, July 20, 2011 2:24 PM
Read: Okeechobee Landfill, # 0930104-018-AC-(PSD-FL-382A), Final Permit

Your message was read on Wednesday, July 20, 2011 2:23:41 PM (GMT-05:00) Eastern Time (US & Canada).

From: Sent:

Hawkins, Tim [THawkins@wm.com] Wednesday, July 20, 2011 2:24 PM

To:

Scearce, Lynn

Subject:

RE: Okeechobee Landfill, #0930104-018-AC-(PSD-FL-382A), Final Permit

We can view the documents.

From: Scearce, Lynn [mailto:Lynn.Scearce@dep.state.fl.us]

Sent: Wednesday, July 20, 2011 2:19 PM

To: Hawkins, Tim

Cc: abrams.heather@epa.gov; forney.kathleen@epa.gov; dee morse@nps.gov; Anderson, Lennon; dbuff@golder.com;

Scearce, Lynn; Heron, Teresa; Friday, Barbara

Subject: Okeechobee Landfill, # 0930104-018-AC-(PSD-FL-382A), Final Permit

Dear Sir/ Madam:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

<u>Note:</u> We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Attention:

Owner/Company Name: OKEECHOBEE LANDFILL, INC.

Facility Name: OKEECHOBEE LANDFILL

Project Number: 0930104-018-AC

Permit Status: FINAL

Permit Activity: CONSTRUCTION Facility County: OKEECHOBEE

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf permit zip files/0930104.018.AC.F pdf.zip

The Office of Permitting and Compliance Section is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at http://www.dep.state.fl.us/air/emission/apds/default.asp.

Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems

opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Office of Permitting and Compliance.

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

Regards,
Lynn Scearce
Office of Permitting and Compliance (OPC)
Division of Air Resources Management
850-717-9025

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Herschel T. Vinyard Jr. is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on this link to the DEP Customer Survey. Thank you in advance for completing the survey.

Waste Management recycles enough paper every year to save 41 million trees. Please recycle any printed emails.

From:

Dee_Morse@nps.gov

Sent:

Wednesday, July 20, 2011 5:04 PM Scearce, Lynn

To:

Subject:

Okeechobee Landfill, # 0930104-018-AC-(PSD-FL-382A), Final Permit

Return Receipt

Your

Okeechobee Landfill, # 0930104-018-AC-(PSD-FL-382A), Final

document: Permit

was

Dee Morse/DENVER/NPS

received

by:

at:

07/20/2011 03:04:14 PM MDT