



# Florida Department of Environmental Protection

## Memorandum

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To: Joseph Kahn  
Through: Trina Vielhauer   
From: Teresa Heron and Al Linero   
Date: April 19, 2010  
SUBJECT: Permit No. 0930104-014-AC (PSD-FL-382)  
Okeechobee Landfill Gas (LFG) to Energy Project

The Final Permit for this project is attached for your approval and signature. The project is subject to PSD preconstruction review. The permit authorizes construction of a LFG to energy project at the Waste Management Okeechobee Landfill located at 10800 N.E. 128<sup>th</sup> Avenue in Okeechobee County.

The attached Final Determination summarizes the publication and comment process. There are no pending petitions for administrative hearings or extensions of time in which to file a petition for an administrative hearing. We recommend your approval of the attached Final Permit for this project.

Attachments

TLV/aal/tmh

## FINAL DETERMINATION

Air Construction Permit  
Okeechobee Landfill, Inc. – Landfill Gas to Energy Project  
DEP File No. 0930104-014-AC (PSD-FL-382)

### 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. 0930104-014-AC (PSD-FL-382)  
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 project is the construction of a landfill gas to energy (LFGTE) plant at the existing Okeechobee Landfill.

The near-term project involves the construction and installation of the following equipment for a LFGTE plant: a landfill gas desulfurization plant (GDP) to remove hydrogen sulfide (H<sub>2</sub>S) in the landfill gas (LFG); one LFG-fueled 15 megawatt (MW) Solar Titan 130 combustion turbine-electrical generator (CTG); three LFG-fueled 3.5 MW Solar Centaur 40 CTG; and five backup open flares.

The project required a review under the rules for the Prevention of Significant Deterioration (PSD) of Air Quality and determinations of Best Available Control Technology (BACT) for particulate matter (PM, PM<sub>10</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>) and visible emissions (VE).

The application, Draft Permit, the Technical Evaluation and Preliminary Determination (TEPD), key correspondence and comments regarding this draft permit are available at the following web link:

[www.dep.state.fl.us/Air/emission/construction/okeechobee.htm](http://www.dep.state.fl.us/Air/emission/construction/okeechobee.htm)

### NOTICES AND PUBLICATION

On February 1, 2010, the Permitting Authority gave Written Notice of its Intent to Issue an Air Permit (Written Notice) to OLI for the described project and provided a copy to EPA Region 4. OLI was directed in the Written Notice as follows:

*"The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at the address or phone number listed above. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C."*

OLI did not file (or request an extension of time to file) a petition for an administrative hearing and did not publish the Public Notice. On February 22, 2010 Golder Associates (Golder) submitted informal comments on behalf of OLI prior to commencement of the 30-day time period during which the Department accepts written comments following publication of the Public Notice.

On March 12, 2010 the EPA Region 4 Office (EPA) sent a letter to the Department regarding another pending project for the Highlands Ethanol Facility (HEF). The key point was that the HEF permit (and presumably the OLI permit) should be issued by April 12, 2010 or additional ambient air impact modeling analyses would be required.

On March 14, 2010 the Department advised OLI of EPA's letter regarding the HEF. The Department (rather than OLI) arranged and paid for publication of the Public Notice as soon as possible in the legal advertisement section of The Okeechobee News; a newspaper of general circulation in the area affected by this project. The notice was published on March 19, 2010.

#### **EPA COMMENTS ON THE DRAFT PERMIT**

On April 9, 2010 the Department received comments by electronic mail from EPA Region 4 pursuant to the notice published by the Department. The following summarizes the comments and the Department's response.

1. EPA Comment 1: "On January 22, 2010, EPA signed into law a new National Ambient Air Quality Standard (NAAQS) for nitrogen dioxide (NO<sub>2</sub>). The new standard is a 1-hour standard set at the level of 100 parts per billion (ppb). The effective date of the new NAAQS will be April 12, 2010. If the final PSD permit has not been issued by the time the new NAAQS is effective, the Division will need to include the appropriate air quality analysis before a final PSD permit is issued."

Department response: The draft permit for this project was issued on February 1, 2010 and the application was submitted (initially incomplete) on July 28, 2006 pursuant to an enforcement action. The applicant did not publish the Public Notice of Intent to Issue so the Department published the notice to finalize the project.

The Department received and reviewed EPA and OLI comments regarding this project by April 9, 2010. However, final action on the permit was not possible until April 19, 2010 to allow completion of the 30-day time period to receive public comment.

The original modeling and technical submittals (e.g. BACT proposals) were performed by Shaw Environmental and Infrastructure, Inc. (Shaw). The most recent modeling submittal by Shaw was provided on October 28, 2008. OLI subsequently hired Golder to continue work on the BACT and permitting issues. Additional modeling was not conducted to demonstrate compliance with the 1-hour NO<sub>2</sub> standard of 189 micrograms per cubic meter (µg/m<sup>3</sup>) and would be difficult to perform in a rigorous manner at this time.

However, it is possible to use the results from the 1-hour CO modeling and scale the results to estimate the estimate 1-hour NO<sub>2</sub> concentrations from the project and then to adjust the results with an appropriate background concentration. The 1-hour CO projection in the following table was given in Table 21 of the TEPD document that was distributed with the draft permit package.

Modeling was performed in a very conservative manner for 1-hour CO assuming construction of the long-term project (not authorized by this permit). This assumed construction and operation of 16 CTG all emitting at the higher half-load operating rate of 1,151 pounds per hour (lb/hr) for a project designed to handle 32,400 standard cubic feet per minute (scfm) of LFG.

Pollutant	Averaging Time	Landfill Gas Flow (scfm)	Emission Rate (lb/hr)	Max Predicted Impact ( $\mu\text{g}/\text{m}^3$ )	Significant Impact Level ( $\mu\text{g}/\text{m}^3$ )	Baseline Concentrations ( $\mu\text{g}/\text{m}^3$ )	AAQS ( $\mu\text{g}/\text{m}^3$ )	Significant Impact?
CO	1-Hour	32,400	1,151	1450 @32,400	2000	~2300	40,000	NO
NO <sub>2</sub>	1-Hour	13,500	78.2	~99 @13,500	None	~83	189	Unknown

This permit will authorize construction of a project that will handle only 13,500 scfm. Emissions of NO<sub>x</sub> (reported as NO<sub>2</sub>) will be highest during full load operation at 78.2 lb/hr. By scaling emissions for the smaller, near-term project and the much lower (than CO) emission rate, a 1-hour value on the order of 99  $\mu\text{g}$  NO<sub>2</sub>/dry standard cubic meter (dscm) is estimated by the department as the project contribution (excluding background) compared with the new NAAQS of 189  $\mu\text{g}$  NO<sub>2</sub>/dscm.

An analogous argument can be made based on the SO<sub>2</sub> modeling performed by the applicant, which will lead to similar results for NO<sub>2</sub> as obtained by CO modeling route.

The Department reviewed the most recent NO<sub>2</sub> data measured at the two nearest NO<sub>2</sub> monitoring stations and summarized it in the following table.

Pollutant	Location	Averaging Period	Ambient Concentration ( $\mu\text{g}/\text{m}^3$ )	
			Year	2 <sup>nd</sup> Highest Value
NO <sub>2</sub>	West Palm Beach, Lantana	1-hour	2009	83
			2008	87
	Average of two years	1-hour	2008-2009	85

In contrast to the rural setting of the OL, the nearest operating NO<sub>2</sub> station at Lantana Road in West Palm Beach is nearer to sources of NO<sub>x</sub> such as major highways and power plants and airport operations.

Comparison with the standard is normally made in the following manner. The highest 1-hour reading is recorded each day during a period of three years (2007-2009). The value for each year that exceeds 98% of all highest 1-hour daily recordings is identified and then the average of those three numbers is reported as the 1-hour compliance value and compared with the standard of 189  $\mu\text{g}/\text{m}^3$ .

Because the Lantana station has operated only for two years, the Department used a more conservative approach by identifying the value that exceeds all but one of the highest 1-hour daily recording (basically 99.5 rather than a 98% criterion) within each year and then reported the average of 85  $\mu\text{g}/\text{m}^3$  for comparison with the standard of 189  $\mu\text{g}/\text{m}^3$ .

By adding the estimated project impact of 99  $\mu\text{g}$  NO<sub>2</sub>/m<sup>3</sup> to the background value of 85  $\mu\text{g}$  NO<sub>2</sub>/m<sup>3</sup>, the total is 184  $\mu\text{g}/\text{m}^3$  and is less than the value of the new standard.

2. EPA Comment 2: "According to the Statement of Basis, the applicant intended to rely on the PM<sub>10</sub> Surrogate Policy to satisfy the applicable PM<sub>2.5</sub> requirements. However, the applicant did not address the appropriateness of the PM<sub>10</sub> BACT determination as a substitute for a BACT analysis of PM<sub>2.5</sub> emissions. Additionally, the relevance of the modeling analysis presented by the applicant to the demonstration of the appropriateness of the PM<sub>2.5</sub> Surrogate Policy for PM<sub>2.5</sub> NAAQS compliance purposes is not clearly stated.

"The applicant should either demonstrate that EPA's PM<sub>10</sub> Surrogate Policy is appropriate for this project and explain the current technical difficulties that make PM<sub>2.5</sub> NAAQS compliance modeling infeasible, or perform a PM<sub>2.5</sub> NAAQS compliance analysis following accepted procedures that include representative ambient background concentrations. To this end, we have developed guidance for

performing an acceptable PM<sub>2.5</sub> analysis which we are making available for use by states and PSD permit applicants.”

The guidance memo is available at: [EPA PM2.5 Memorandum](#)

Department response: The Department discussed PM<sub>2.5</sub> on Page 27 of the TEPD document as follows:

*“Siloxanes and sulfur compounds such as H<sub>2</sub>S provide the opportunity for fine PM (PM<sub>2.5</sub>) formation. Desulfurization of the LFG will reduce the possibility of PM<sub>2.5</sub> formation in the environment. Siloxanes not only contribute to PM/PM<sub>10</sub>/PM<sub>2.5</sub>, they also limit the ability to use catalyst for NO<sub>x</sub> and CO and to use the more efficient recuperative CTG.*

*Efficient combustion will minimize PM/PM<sub>10</sub> emissions, while SO<sub>2</sub> and NO<sub>x</sub> control will minimize PM<sub>2.5</sub> emissions.”*

In the case of PM<sub>2.5</sub>, the Department relies on precursors and surrogates. The rationale is as follows:

On September 16, 1997, EPA revised the NAAQS for particulate matter, which includes a new NAAQS for PM<sub>2.5</sub>. Florida implemented an ambient monitoring program for PM<sub>2.5</sub>. As EPA mentioned in its guidance dated October 23, 1997, there are significant technical difficulties with respect to PM<sub>2.5</sub> monitoring, emissions estimation and modeling.

The EPA guidance recommended the use of PM<sub>10</sub> as a surrogate for PM<sub>2.5</sub> in meeting New Source Review (NSR) requirements under the Clean Air Act, including the permit programs for PSD. Meeting these measures in the interim will serve as a surrogate approach for reducing PM<sub>2.5</sub> emissions and protecting air quality.

Florida is in the process of revising its State Implementation Plan to address the new PM<sub>2.5</sub>, NAAQS, PSD significant emissions rates and ambient air quality impact thresholds for modeling analyses as required by EPA for approved states by 2011. Until state regulations support PSD preconstruction review for PM<sub>2.5</sub> emissions, the Department will generally rely on PM<sub>10</sub> emission limits and PM<sub>2.5</sub> precursor limits (e.g., sulfuric acid mist (SAM), SO<sub>2</sub>, volatile organic compounds (VOC), ammonia (NH<sub>3</sub>), and NO<sub>x</sub>). This approach is **more robust** than previous EPA guidance memoranda.

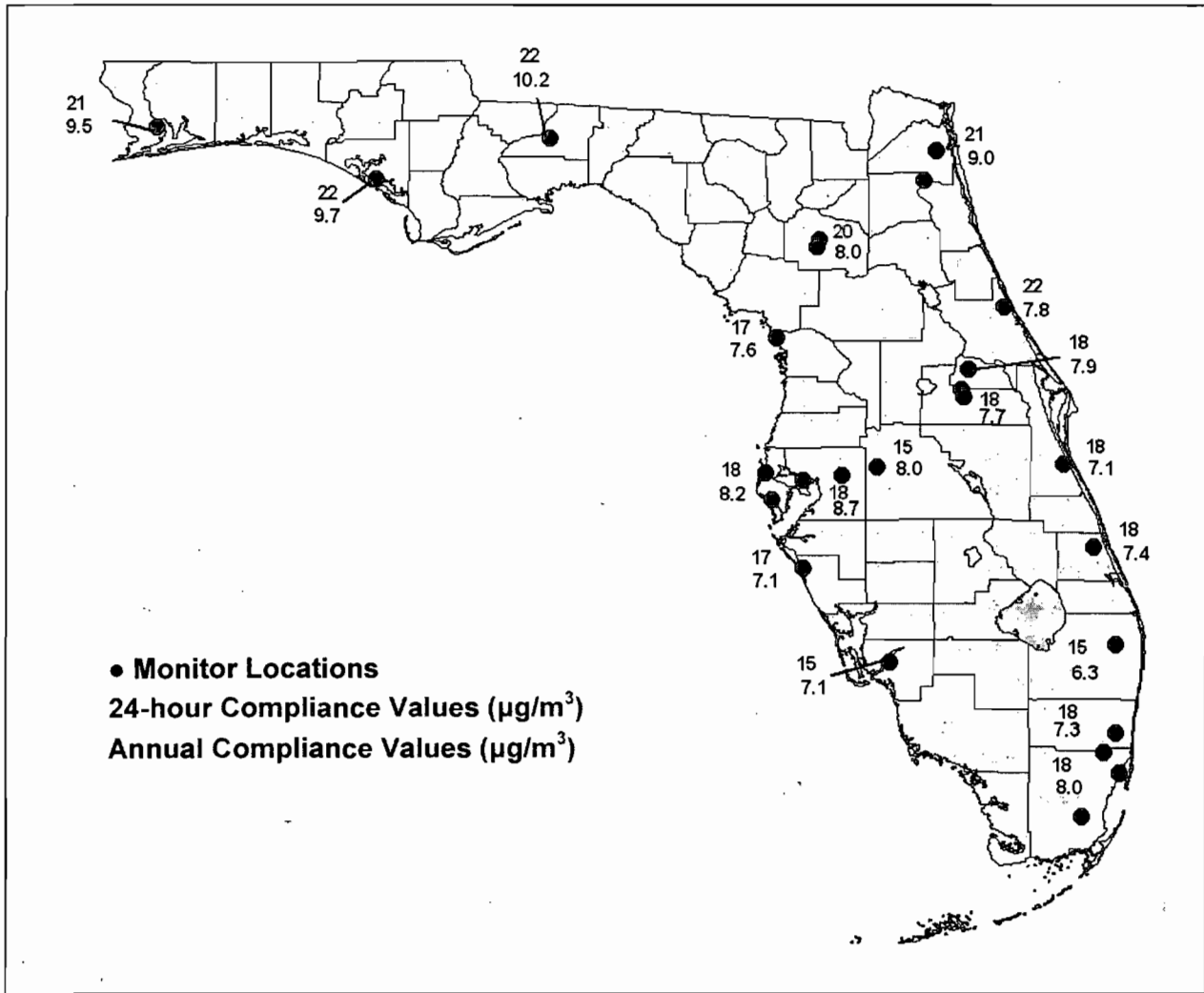
For the OLI project, BACT determinations were conducted for PM/PM<sub>10</sub>, NO<sub>x</sub>, CO, SO<sub>2</sub> and VE.

The Department has made a significant investment in PM<sub>2.5</sub> ambient monitoring and the network provides excellent coverage throughout the state. The figure below is a display of the 24-hour and annual compliance values for PM<sub>2.5</sub> throughout Florida for the period 2007-2009.

There are no regulatory PM<sub>2.5</sub> monitors in Okeechobee County. However, the compliance values at the nearest counties where monitors are located are less than or equal to 18 and 8 µg/m<sup>3</sup> for the 24-hour and annual standards, respectively.

OLI performed PM<sub>10</sub> modeling but not PM<sub>2.5</sub> modeling. The 24-hour and annual PM<sub>10</sub> projections in the following table were given in Table 21 of the TEPD document for the full development (32,400 scfm) case.

Pollutant	Averaging Time	Max Predicted Project Impact (µg/m <sup>3</sup> )	Significant Impact Level (µg/m <sup>3</sup> )	Baseline Concentrations (µg/m <sup>3</sup> )	AAQS (µg/m <sup>3</sup> )	Significant Impact?
PM <sub>10</sub>	Annual	1	1	~19	50	YES
	24-Hour	7	5	~79	150	YES



### Florida PM<sub>2.5</sub> Compliance Values

The following table includes estimates of the total PM<sub>2.5</sub> impacts based on the sum of the project PM<sub>10</sub> impacts (from a long-term 32,400 scfm project rather than a near-term 13,500 scfm project) and the highest compliance values measured at nearest counties.

#### PM<sub>2.5</sub> Ambient Air Quality Impacts

Pollutant	Averaging Time	Major Sources Impact ( $\mu\text{g}/\text{m}^3$ )	Background [2007–2009] ( $\mu\text{g}/\text{m}^3$ )	Total Impact ( $\mu\text{g}/\text{m}^3$ )	NAAQS ( $\mu\text{g}/\text{m}^3$ )
PM <sub>2.5</sub>	24-hour	7	18	25	35
	Annual	1	8	9	15

The Department notes that the procedure used is overly conservative since none of the PM<sub>2.5</sub> monitors strategically placed near other rural areas and also the more industrialized areas of the state actually measure values as great as those predicted above.

## OLI COMMENTS ON THE DRAFT PERMIT

On March 30, 2010 the Department received formal comments by electronic mail from Golder on behalf of OLI pursuant to the notice published by the Department. The comments can be viewed at:

[www.dep.state.fl.us/Air/emission/construction/okeechobee/L033010\\_505.pdf](http://www.dep.state.fl.us/Air/emission/construction/okeechobee/L033010_505.pdf)

The following summarizes the comments and provides the Department's responses.

1. Conditions II.7 and III.A.1 (OLI comments Nos. 1 and 3): OLI states that if OLI does not accept the permit, or accepts the permit but never implements (constructs) the project, it will not be obligated to install the GDP. OLI requests that the deadline to install the GDP be revised from December 31, 2011 to June 30, 2012.

Department response: OLI is required to implement the GDP project pursuant to the rules cited in the TEPD document and draft permit and was provided the opportunity to petition the permit or request a public hearing. The Department will entertain a revision of the installation deadline through a permit modification application with appropriate documentation of the GDP project schedule and milestones.

2. Section III.A, Emission Unit Description (OLI comment No. 2): According to OLI, the closure date of the Berman Landfill and the opening date of the Clay Farm landfill are no longer correct, are subject to revision at any time and OLI suggests these statements be deleted.

Department response: The description is not a permit condition and the permit treats the Berman and Clay phases as a single landfill within a single facility. No change is required. However, the Department will entertain a revision of the description through an anticipated permit modification application with appropriate replacement language.

3. Conditions III.A 5 and 10 and III.B.6 (OLI Comments 6, 9 and 13): OLI requests a permit provision allowing at least 2 weeks downtime per year for the GDP during which time untreated LFG may be combusted in the flares. OLI objects to the H<sub>2</sub>S limit of 200 parts per million by volume (ppmv) as BACT.

Department response: No support was provided by OLI for a greater H<sub>2</sub>S limit and the Department will not change its case-by-case BACT determination. Supplier brochures indicated that values even less than 200 ppmv can be achieved and suggest such values have been achieved at the Waste Management (WM) Central Disposal Sanitary Landfill (CDSL) in Pompano Beach, Florida. The Department will entertain a revision to address the requested 2-week down time for maintenance through the anticipated permit modification application with appropriate analysis of the SO<sub>2</sub> impacts and comparison with the NAAQS.

4. Condition III.A.8 (OLI Comment 7): According to OLI, the requirement for a H<sub>2</sub>S continuous emissions monitoring system (CEMS) is very costly (estimated at \$40,000-\$60,000), places undue burden on the permittee, and is not justified technically. OLI requests the option of daily GDP H<sub>2</sub>S monitoring (in lieu of the H<sub>2</sub>S-CEMS) such as practiced at the WM CDSL, for purposes of estimating and tracking H<sub>2</sub>S and SO<sub>2</sub> emissions.

Department response: No details regarding the alternative sampling and testing methods were provided. The Department will entertain alternative daily sampling through the anticipated permit modification application for cases when the H<sub>2</sub>S CEMS is not available. OLI will need to provide a proposal with details regarding the alternative methodology and procedures for promptly returning the H<sub>2</sub>S CEMS to reliable operation.

5. Condition III.A.9 (OLI Comment 8): OLI agrees with the monthly H<sub>2</sub>S record keeping requirements but requests that reports be submitted on a quarterly or semi-annual basis.

Department response: The Department will entertain the requested change through the anticipated permit modification application.

6. Condition III.A.2 (OLI Comments 4 and 5): OLI believes that a 3 year requirement to expand the LFGCS goes far beyond what is required by 40 CFR 60, Subpart WWW and requests that the requirement be changed to 5 years to be consistent with Subpart WWW. OLI states that odor is not a PSD pollutant and should not be subject to BACT or any other stricter rule than what is required under the 40 CFR Subpart WWW requirements.

Department response: The Department described sufficient rule authority in the TEPD and the permit to require earlier expansion of the LFGCS than otherwise required by 40 CFR 60, Subpart WWW. According to Table 9 of the TEPD, it also appears that volatile organic compounds (VOC) emissions in 1996 were on the order of 374 tons per year (TPY) suggesting that PSD was triggered by that time. Early expansion of the LFGCS controls VOC, non-methane organic compounds (NMOC), H<sub>2</sub>S and total reduced sulfur (TRS) that are all PSD pollutants and at the very least insure that PSD is not triggered (or further triggered).

The Department will not change the condition, but will entertain a request to exclude BACT as part of the rationale for early expansion of the LFGCS through the anticipated permit modification application with better documentation of historical emissions.

7. Condition III.B.1 (OLI Comment 10): OLI requests that the last portion of the first sentence “to backup the combustion turbine generators (CTG) that will combust the LFG to generate electrical power” be removed and to delete the requirement to use continuous pilot flames in the flares. Rather than requiring the use of continuous pilots, OLI prefers to have automatic startup/shutdown sequences which include the starting of the pilot flame.

Department response: BACT requires enclosed combustion devices which in this case means CTG. If open flares were not backup control devices, then the Department would have required enclosed flares (also enclosed combustion devices).

The Department will not change the present description of the open flares as backup devices to the CTG. The Department will entertain a request through the anticipated permit modification application to provide for startup/shutdown operation sequences that include starting of the pilot flame.

8. Condition III.B.3 (OLI Comment 11): OLI does not consider it necessary to submit a flare shutdown plan detailing the schedule of how the existing flares will be shutdown as the new flares are constructed. OLI notes that it may wish to replace (rather than constantly repair) some older flares prior to the GDP being operational. Previous conditions which required the GDP to be installed prior to combustion of any LFG in the new flares or CTG will have to be revised as well to reflect this change.

Department response: The Department will not change the requirement to submit a flare shutdown plan. The Department will entertain a request through the anticipated permit modification application to clarify the manner by which open flares (including flares to replace the existing enclosed flares), which are constructed before the CTG and the GDP, can be used as the primary combustion devices until the CTG and GDP are constructed and begin operation.

9. Condition III.B.5 (OLI Comment 12): Remove the statement “the (open) flares may only be operated when the CTG are unavailable due to maintenance or malfunction or when LFG flow rate is insufficient to support operation of a CTG.” According to OLI, if they decide to not construct the CTGs, the collected (and cleaned) LFG would still need to be flared and NO<sub>x</sub> and CO emission rates are less when the LFG is combusted in the flares versus the CTG.



Department response: The Department's BACT determination was predicated on the construction of CTG with open flares as backup. If CTG will not be built, then OLI will need to submit another permit application with a complete BACT proposal. The Department would review such an application as though construction had not yet commenced on any of the new flares or replacement flares authorized by the present permit.

10. Condition III.B.10, 11, 13 and 14 (OLI Comments 14, 15, 16 and 17): OLI requests that monitoring of flame temperature be removed because it is not feasible to measure on an open flare. OLI request removal of the requirement to perform a visual inspection of the flares on a daily basis. OLI requests that the monthly inspection and monitoring requirements and the quarterly maintenance requirements be removed from the condition. OLI request deletion of the requirement that "an on-site flare alarm or an auto dialer shall be maintained in working order at all times that ...."

Department response: The OLI statement provides further rationale for requiring enclosed flares. Some method of providing reasonable assurance is necessary to ensure ongoing compliance with the 98% NMOC control requirement or 20 ppmvd NMOC limit. The Department will entertain a request through the anticipated permit modification application of alternatives to the present temperature monitoring requirement.

11. Conditions III.B.15 and 19 (OLI Comments 18 and 21): Insert "stack" before "tests" in the requirements to notify and submit reports to the Compliance Authority.

Department response: The Department will entertain a request through the anticipated permit modification application to add "stack" before the words "tests" in the two referenced permit conditions. Condition 19 will be correctly renumbered from III.B.19 to III.B.20.

12. Condition III.B.16 (OLI Comment 19): OLI requests removal of the words "methods for minimizing excess emissions" from the requirement regarding Work Practice that "The training shall include good operating practices as well as methods for minimizing excess emissions".

Department response: The Department will entertain a request through the anticipated permit modification application to modify this permit condition language. The Test Methods Condition III.B.16 will be correctly numbered as Condition III.B.17.

13. Condition III.B.18 (OLI Comment 20): OLI requests that the permit reference the startup, shutdown and maintenance plan required by 40 CFR Chapter 63, Subpart AAAA instead of the permit requirement to maintain "a written log the duration of each flare event and the reason for flaring".

Department response: The Department will entertain a request through the anticipated permit modification application to make the requested change. The permit condition will be correctly renumbered from III.B.18 to III.B.19.

14. Conditions III.C.3, 9, 12 and 17 and III.D.3, 9, 12 and 17 (OLI Comments 23, 25-27 and 29-32): OLI does not believe NO<sub>x</sub> CEMS are required for the CTG that will be installed for this project on the basis of 40 CFR 60, Subpart KKKK.

Department response: The NO<sub>x</sub>-CEMS are required by the BACT determination if not by the requirements of 40 CFR 60, Subpart KKKK. Also, it is advisable to install the NO<sub>x</sub>-CEMS given the analysis conducted in response to EPA Comment No. 1 relating to the implementation of the new 1-hour NO<sub>2</sub> NAAQS.

15. Condition III.C.1. and III.D.1 (OLI Comments 22 and 28): Remove the words “an inlet air filtration system; one automated CTG control system; and one CTG stack” from the conditions “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”. A similar comment was made regarding the 3.5 MW LFG-fueled Solar C-40 CTG.

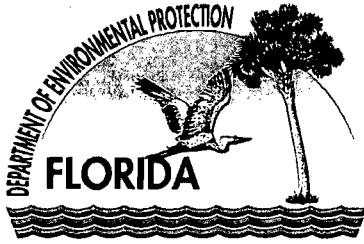
Department response: The description is accurate even though OLI believes the terms “LFG-fueled Solar T-130 CTG” and “LFG-fueled Solar C-40 CTG” encompass all of the referenced equipment. No change is necessary.

16. Condition III.C.5 (OLI Comment 24): OLI requests use of the term “design heat input” for the Solar T-130 (as used for the Solar C-40) instead of “maximum heat input”.

Department response: The Department will entertain a request through the anticipated permit modification application to revise the maximum heat input for the Solar T-130 but not to switch to a design heat input condition.

## CONCLUSION

The final action of the Department is to issue the permit without any changes except to correct the numeration for certain conditions as described.



# Florida Department of Environmental Protection

Bob Martinez Center  
2600 Blairstone Road  
Tallahassee, Florida 32399-2400

Charlie Crist  
Governor  
Jeff Kottkamp  
Lt. Governor  
Michael W. Sole  
Secretary

## PERMITTEE:

Okeechobee Landfill, Inc.  
(a Waste Management Company)  
1000 Parkwood Circle SE, Suite 700  
Atlanta, GA 30339

*Responsible Official:*  
John Van Gessel

Air Permit No. 0930104-014-AC  
Expires: June 30, 2015  
PSD-FL-382  
SIC No. 4953  
Okeechobee Landfill (OL)  
Landfill Gas to Energy Project

## PROJECT AND LOCATION:

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

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


This final permit is organized into the following sections: Section 1 - General Information; Section 2 - Administrative Requirements; Section 3 - Emissions Unit Specific Conditions; and, Section 4 - Appendices. Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix CF of Section 4 of this permit. As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.

## STATEMENT OF BASIS:

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

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

Executed in Tallahassee, Florida

  
\_\_\_\_\_  
Joseph Kahn, Director (Date) 4/19/10  
Division of Air Resource Management

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on 4/20/10 to the persons listed below.

- John Van Gessel, Waste Management of Florida, Inc.: [jvangessel@wm.com](mailto:jvangessel@wm.com)
- Heather Abrams, U.S. EPA Region 4: [abrams.heather@epa.gov](mailto:abrams.heather@epa.gov)
- Kathleen Forney, U.S. EPA Region 4: [forney.kathleen@epa.gov](mailto:forney.kathleen@epa.gov)
- Dee Morse, National Park Service, Denver CO: [dee\\_morse@nps.gov](mailto:dee_morse@nps.gov)
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- Vickie Gibson, DEP BAR Reading File: [victoria.gibson@dep.state.fl.us](mailto:victoria.gibson@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.

  
\_\_\_\_\_  
(Clerk)

4/20/10  
(Date)

## SECTION I – GENERAL INFORMATION

### FACILITY DESCRIPTION

Okeechobee Landfill, Inc. (a Waste Management Company) 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 208 acres. The total acreage for which solid waste permits have been issued comprises 847 acres. Methane-rich LFG produced from the decomposition of waste materials placed in the 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 a LFG GDP for existing LFG and flares and authorizes the future installation a LFGTE plant using desulfurized LFG as fuel in 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<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), and particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>).

This LFGTE project affects the following existing emissions units (EU) at the OL.

Facility ID 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.
CD*-04	Temporary open flare with a capacity of 3,300 scfm for odor control.
CD*-05	Temporary open flare with a capacity of 3,000 scfm for odor control. Not constructed.

\* Control Device (CD) number is used for these temporary flares.

The table on the following page is a list of the changes planned to the existing EU at the OL as well as the new EU authorized by this permit. In the table, EU in underlined text represents new emissions units addressed by this permit. EU 003 and 005 will be deactivated as a result of this project.

**SECTION I – GENERAL INFORMATION**

<b>Facility ID No. 0930104</b>	
<b>EU ID No.</b>	<b>Emission Unit Description</b>
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.
<u>004</u>	(004A) (004B) Existing open backup flare with a capacity of 2,800 scfm to be relocated and replaced by two 1,500 scfm open flares (004A, 004B). Initially only 004A will be installed.
005	Enclosed flare with a capacity of 3,000 (scfm) and including a leachate evaporation unit. To be ultimately deactivated.
<u>006</u>	New open flare with a capacity of 3,000 scfm. In lieu of temporary odor control flare.
<u>007</u>	New open flare with a total capacity of 3,000 scfm. In lieu of temporary odor control flare.
<u>008</u>	New open flare with a total capacity of 3,000 scfm. Initial installation.
<u>009</u>	New open flare with a total capacity of 3,000 scfm. Initial installation.
<u>016</u>	One 15 MW Model Solar Titan 130 (T-130) CTG. Initial installation.
<u>017 - 019</u>	Three 3.5 MW Model Solar Centaur 40 (C-40) CTG. Initial installation.

**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

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1. **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. **Compliance Authority:** 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. **Appendices:** 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 CEMS: Continuous Emissions Monitoring System (CEMS) Requirements;
  - f. Appendix CF: Citation Formats and Glossary of Common Terms;
  - g. Appendix CTR: Common Testing Requirements;
  - h. Appendix GC: General Conditions;
  - 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,
  - l. Appendix YYYYY: NESHAP Subpart YYYYY 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

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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 December 31, 2011 a GDP such that all collected LFG shall be treated to a concentration less than or equal to 200 parts per million by volume of hydrogen sulfide (H<sub>2</sub>S) by volume (ppmv) as determined by a H<sub>2</sub>S continuous emission monitoring system (CEMS) 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. Modifications: No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
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. Title V Permit: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V 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.]



## SECTION II ADMINISTRATIVE REQUIREMENTS

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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. Allowed: 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. Malfunction: 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. Department Discretion: 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. Department Notification: 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	<p><u>Okeechobee Landfill (OL)</u>: 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 permit regulates among other requirements the capacity, disposal rate and the number of cells constructed. A summary of the OL follows:</p> <ul style="list-style-type: none"> <li>• <u>Berman Road Landfill</u>: This is an existing emission unit 208 acres in size. This emission unit is expected to be closed by 2012.</li> <li>• <u>Clay Farm Landfill</u>: This is a new 639 acre landfill located in another portion of the overall existing stationary source. This landfill is expected to be open by 2012. The maximum solid waste disposal rate at this landfill is specified at 7,000 tons per day in the Solid Waste Permit 0247963-001-SC.</li> <li>• <u>GDP Plant</u>: The OL is required to construct and operate a GDP plant to reduce H<sub>2</sub>S concentrations in the LFG prior to its combustion.</li> <li>• <u>LFGCS</u>: The system used to collect the LFG prior to combustion in CTG or backup flares. The existing LFGCS will be expanded as a result of this project.</li> </ul>

**CONSTRUCTION**

1. GDP: The permittee is required to install and operate by December 31, 2011 a GDP such that all collected LFG shall be treated to a concentration less than or equal to 200 ppmv H<sub>2</sub>S (12 gr S/100 SCF) 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.]
2. LFGCS: By December 31, 2011 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 is 3 years based on BACT and odor control and is more stringent than the 5 year time requirement in 40 CFR 60, Subpart WWW}*

**PERFORMANCE RESTRICTIONS**

3. LFGCS Capacity: 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.]
4. GPD Capacity: The maximum permitted capacity of the GDP is 32,500 scfm of LFG on a 30 day rolling average basis (see **Condition 15a** of Appendix CEMS for definition of 30 day rolling average). [Application No. 0930104-014-AC and Rules 62-212.400 and 62-4.070 (3), F.A.C.]  
*{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}*
5. Restricted 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. H<sub>2</sub>S Concentration: The H<sub>2</sub>S concentration in the LFG after it is treated by the GDP shall not exceed 200 ppmv (12 gr S/100 scf) prior to combustion. The H<sub>2</sub>S content of the landfill gas shall be monitored in accordance with specific **Conditions 7 and 8** of this subsection. [Rules 62-212.400 and 62-4.070(3), F.A.C.]

#### MONITORING REQUIREMENTS

7. LFG Monitoring: 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. H<sub>2</sub>S Continuous Monitoring System (CEMS): The permittee shall install a H<sub>2</sub>S CEMS to continuously monitor and record the concentration of H<sub>2</sub>S in the LFG after it is processed by the GDP and before it is combusted in the CTG or the backup flares. The CEMS shall be calibrated, maintained, and operated according to the manufacturer specifications. The LFG may be monitored at only one location if monitoring at this location accurately represents the concentration of H<sub>2</sub>S in the LFG being combusted. The applicant shall notify the Compliance Authority of the CEMS location(s) 90 days before installation of the CEMS. Within 30 days of initial startup of H<sub>2</sub>S CEMS (or startup of any new or replacement H<sub>2</sub>S CEMS), the performance evaluations for this H<sub>2</sub>S CEMS shall be done using Performance Specification 7. EPA Methods 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations. [Design; Rules 62-210.200 (BACT) and 62-4.070(3), F.A.C.]

#### RECORDKEEPING AND REPORTING REQUIREMENTS

9. GDP Reports and Records: 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 each calendar month: total daily and monthly gas flow rates in scfm; average daily and monthly H<sub>2</sub>S 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. H<sub>2</sub>S LFG Concentration Exceedance: If an exceedance of the allowed H<sub>2</sub>S concentration of 200 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 CEMS system during the period of data unavailability which could affect the ability of the system to record the applicable H<sub>2</sub>S concentration limit. Operations of the CEMS system and affected facility during periods of data unavailability are to be compared with operation of the CMS system 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.]

**SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS**

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

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 004, 006, 007, 008, AND 009)**

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

<b>EU ID NO.</b>	<b>FLARES EMISSION UNIT DESCRIPTION</b>
004	1,500 scfm Open Utility Flare
006	3,000 scfm Open Utility Flare
007	3,000 scfm Open Utility Flare
008	3,000 scfm Open Utility Flare
009	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 with a continuous pilots and combustion chambers to combust LFG as necessary to backup the CTG that will combust the LFG to generate electrical power. The presence of flare pilot flames shall be monitored using thermocouples or any other equivalent device to detect the presence of a flame. [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].
2. **Flare Design:** 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:** Ninety days before construction commences on the new flares authorized by this permit, the permittee shall submit to the Compliance Authority a flare shutdown plan detailing the schedule of how the existing flares will be shutdown as the new flares are constructed. Construction of the new flares cannot commence until the flare shutdown plan is approved by the Compliance Authority. The permittee shall notify the Compliance Authority 7 days before each existing flares is shutdown and removed. 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 004 and 3,000 scfm of LFG for EU 006, 007, 008 and 009. [Rule 62-210.200(PTE), F.A.C. and Rule 62-4.070 (3) F.A.C.]
5. **Restricted Operation:** The hours of operation of these emission units are not limited (8,760 hours per year). However, the flares may only be operated when the CTG are unavailable due to maintenance or malfunction or when LFG flow rate is insufficient to support operation of a CTG. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]
6. **Flare H<sub>2</sub>S Limit:** Only treated LFG containing no more than 200 ppmv of H<sub>2</sub>S 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.]

## SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

### SUBSECTION B. OPEN FLARES (EU 004, 006, 007, 008, AND 009)

#### 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]

#### EMISSIONS STANDARDS

8. Visible Emissions (VE) Standard: The flares shall be designed for and operated with no visible emissions (VE) as determined by the methods specified in paragraph 40 CFR 60.18 (f), except for period 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. VE Compliance Tests: 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 temperature at each flare, shall be installed prior to the collection and combustion of the LFG. 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.
  - (3) Flare alarm or auto dialer to notify the operator in case of a flare malfunctions or emergency.
- [Rule 62-4.070 (3) F.A.C., 40 CFR 60.756 (c)]
11. Flame Presence Visual 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. The owner or operator shall perform a visual inspection of the flare on a daily basis. [Rule 62-4.070 (3) F.A.C., 40 CFR 60.18]
12. Flare Heat Content and Tip Velocity Specification: In accordance with 40CFR60.18(c)(3), for each open flare, the owner or operator of this facility shall select to adhere to the heat content specifications of 40CFR60.18(c)(3)(ii) or the maximum tip velocity specifications of 40CFR60.18(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.

## SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

### SUBSECTION B. OPEN FLARES (EU 004, 006, 007, 008, AND 009)

13. **Inspection and Maintenance of the Flares:** The owner or operator shall inspect all flare components on a monthly basis. Monitoring of the condensate pump shall be performed on a monthly basis. Maintenance of the flare and condensate pump on a quarterly basis. All gas monitoring equipment shall be calibrated on an as needed basis. If any problems are found during an inspection or maintenance, then the problem(s) and corrective action(s) taken shall be listed in the report. The inspection and maintenance reports shall be kept on site and made available to Department's Southeast District Office upon request. [Rule 62-4.070 (3) F.A.C., 40 CFR 60.756 (c)]
14. **Flare Malfunctions and Emergencies:** When this facility is in operation, an on-site flare alarm or an auto dialer shall be maintained in working order at all times that notifies the appropriate on-site personnel the flare is out of service. Response to the alarm or auto dialer shall occur within eight (8) hours of receiving the alert. If the flare cannot be brought back online within ten (10) hours of the alert, the owner or operator shall notify the Department's Southeast District Office within 24 hours. All appropriate measures shall also be taken to limit emissions until the flare is again operating properly. [Rule 62-4.070 (3) F.A.C.]
15. **Test Requirements:** 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.]
16. **Test Methods:** 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 and supervisors 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. **LFG Flow Rate:** The permittee is required to record the total gas flow rate in scfm to each flare on a monthly average basis and measure the sulfur content of the LFG on a 30 day rolling average basis, and report the flow rate and sulfur content results monthly to the Compliance Authority. [Rule 62-4.070 (3) F.A.C.]

### RECORDS AND REPORTS

19. **Records:** The permittee shall record in a written log the duration of each flare event and the reason for flaring. If requested by the Compliance Authority, the permittee shall provide a copy of these records or a summary of these records. [Rule 62-4.070(3), F.A.C.]
20. **Test Reports:** 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. **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 C. SOLAR T-130 CTG (EU-016)

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
016	15 MW Solar Titan 130 (T-130) CTG

#### EQUIPMENT

1. **CTG:** 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. **Circumvention:** 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. **NO<sub>x</sub> CEMS:** In accordance with §60.4335(b) and §60.4345, the permittee shall install, calibrate, operate and maintain a CEMS to continuously monitor and record NO<sub>x</sub> emissions from the CTG exhaust. The CEMS 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. [Rule 62-4.070(3), F.A.C.; and Subpart KKKK in 40 CFR 60]

#### PERFORMANCE RESTRICTIONS

4. **Authorized Fuels:** The only authorized fuel for use in the CTG is treated LFG containing no more than 200 ppmv of H<sub>2</sub>S on a 30 day rolling average basis. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]
5. **CTG Permitted Capacity:** The maximum 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.]
6. **Restricted 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

7. **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)].



**SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS**

**SUBSECTION C. SOLAR T-130 CTG (EU-016)**

**NESHAP APPLICABILITY**

8. NESHAP Subpart YYYYY Applicability: This facility is a major source of HAP. This CTG is potentially subject to 40 CFR 63, Subpart YYYYY - 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 YYYYY to this CTG see Appendix YYYYY of this permit.

**EMISSION LIMITS**

9. Emission Standards: The following standards are at least as stringent as the Subpart KKKK limits described in **Condition 7** 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 <sup>a</sup>		CEMS-Based Averages <sup>g</sup>	
		ppmvd <sup>b</sup>	lb/hr <sup>f</sup>	ppmvd <sup>b</sup>	lb/hr <sup>f</sup>
CO	LFG	100	78.4	N/A	N/A
NO <sub>x</sub> <sup>c</sup>	LFG	72	46.4	72 4-hour block average <sup>g</sup>	46.4 4-hour block average <sup>g</sup>
PM/PM <sub>10</sub> <sup>d</sup>	LFG	N/A	2.8	N/A	
		200 ppmv H <sub>2</sub> S in LFG			
		Visible emissions shall not exceed 10% opacity for each 6-minute block average.			
SAM/SO <sub>2</sub> <sup>e</sup>	LFG	200 ppmv H <sub>2</sub> S in LFG			

- 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 or certification of the CEMS instruments shall also be used to demonstrate compliance with the individual standards during the time of those tests. NO<sub>x</sub> mass emission rates are defined as oxides of nitrogen expressed as nitrogen dioxide (NO<sub>2</sub>). Continuous compliance with the 4-hour rolling average NO<sub>x</sub> standards shall be demonstrated based on data collected by the required CEMS.
- 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 H<sub>2</sub>S specification effectively limits the potential emissions of SAM and SO<sub>2</sub> from the CTG. Compliance with the LFG H<sub>2</sub>S specification of 200 ppmv shall be determined by H<sub>2</sub>S CEMS. Such representative LFG CEMS data will insure that the sulfur content of the LFG (a type of biogas) does not exceed (0.15 lb SO<sub>2</sub>/mmBtu) heat input limitation of 40 CFR 60, Subpart KKKK.
- 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. CEMS monitoring compliance shall in accordance with the 40 CFR 60, NSPS, Subpart KKKK for NO<sub>x</sub>.

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

## SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

### SUBSECTION C. SOLAR T-130 CTG (EU-016)

#### EXCESS EMISSIONS

10. Definitions Related to Excess Emissions: 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.
11. 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 CEMS data. [Rule 62-210.700(4), F.A.C.]
12. 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<sub>x</sub> Emissions*: Excess NO<sub>x</sub> emissions based on a 4 hour block average standard shall be calculated in accordance with the NSPS Subpart KKKK provisions.

#### TEST METHODS AND PROCEDURES

13. Initial Compliance Tests: The CTG shall be tested to demonstrate initial compliance with the emissions standards for CO, NO<sub>x</sub>, PM/PM<sub>10</sub> 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<sub>x</sub> 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.]
14. Annual Compliance Tests: During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), the CTG shall be tested to demonstrate compliance with the emissions standards for CO and opacity. The CTG shall demonstrate compliance with the NO<sub>x</sub> 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.]
15. Test Requirements: 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.]
16. 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 <sub>x</sub> 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.

## SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

### SUBSECTION C. SOLAR T-130 CTG (EU-016)

Method	Description of Method and Comments
19	Determination of SO <sub>2</sub> Removal Efficiency and PM, SO <sub>2</sub> and NO <sub>x</sub> Emission Rates Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.

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]

#### CONTINUOUS MONITORING REQUIREMENTS

17. CEMS: The permittee shall install, calibrate, maintain and operate CEMS and a diluent monitor to measure and record the emissions of NO<sub>x</sub> from the CTG in a manner sufficient to demonstrate continuous compliance with the CEMS 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<sub>x</sub> standard (and subject to the specified averaging period), the permittee shall notify the Compliance Authority (see Appendix CEMS of this permit).
- a. *NO<sub>x</sub> Monitor*: The NO<sub>x</sub> monitor shall be certified, operated, and maintained in accordance with the requirements of 40 CFR 75. Record keeping and reporting shall be conducted pursuant to Subparts F and G in 40 CFR 75. The RATA tests required for the NO<sub>x</sub> monitor shall be performed using EPA Method 20 or 7E in Appendix A of 40 CFR 60.
  - b. *Diluent Monitor*: The oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) content of the flue gas shall be monitored at the location where CO and NO<sub>x</sub> are monitored to correct the measured emissions rates to 15% oxygen. If a CO<sub>2</sub> monitor is installed, the oxygen content of the flue gas shall be calculated using F-factors that are appropriate for the fuel fired. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.

#### OTHER MONITORING REQUIREMENTS

18. LFG Flow Measurements: 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

19. 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]
20. 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-017, 018 AND 019)

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
017	3.5 MW Solar Centaur 40 (C-40) CTG
018	3.5 MW Solar Centaur 40 (C-40) CTG
019	3.5 MW Solar Centaur 40 (C-40) CTG

#### EQUIPMENT

1. CTG: 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. Circumvention: 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. NO<sub>x</sub> CEMS: In accordance with §60.4335(b) and §60.4345, the permittee shall install, calibrate, operate and maintain a CEMS to continuously monitor and record NO<sub>x</sub> emissions from the exhaust of each CTG. Each CEMS 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.  
[Rule 62-4.070(3), F.A.C.; and Subpart KKKK in 40 CFR 60]

#### PERFORMANCE RESTRICTIONS

4. Authorized Fuels: The only authorized fuel for use in each CTG is treated LFG containing no more than 200 ppmv of H<sub>2</sub>S of on a 30 day rolling average basis. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]
5. 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.
6. Restricted 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

7. 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)].

**SECTION IV – EMISSION UNIT(S) SPECIFIC CONDITIONS**

**SUBSECTION D. SOLAR T-40 CTG (EU-017, 018 AND 019)**

**NESHAP APPLICABILITY**

8. 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.

**EMISSION LIMITS**

9. Emission Standards: The following standards are at least as stringent as the Subpart KKKK limits described in **Condition 7** above and in Appendix KKK of this permit. Emissions from each of these CTG shall not exceed the following standards.

Pollutant	Method of Operation	Initial/Annual Stack Test 3-Run Average <sup>a</sup>		CEMS-Based Averages <sup>g</sup>	
		ppmvd <sup>b</sup>	lb/hr <sup>f</sup>	ppmvd <sup>b</sup>	lb/hr <sup>f</sup>
CO	LFG	250	28.6	N/A	N/A
NO <sub>x</sub> <sup>c</sup>	LFG	42	7.9	42 4 hour block average <sup>g</sup>	7.9 4 hour block average
PM/PM <sub>10</sub> <sup>d</sup>	LFG	N/A	2.8	N/A	
		200 ppmv H <sub>2</sub> S in LFG			
		Visible emissions shall not exceed 10% opacity for each 6-minute block average.			
SAM/SO <sub>2</sub> <sup>e</sup>	LFG	200 ppmv H <sub>2</sub> S in LFG			

- a. All tests conducted at 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 or certification of the CEMS instruments shall also be used to demonstrate compliance with the individual standards during the time of those tests. NO<sub>x</sub> mass emission rates are defined as oxides of nitrogen expressed as nitrogen dioxide (NO<sub>2</sub>). Continuous compliance with the 4 hour average NO<sub>x</sub> standards shall be demonstrated based on data collected by the required CEMS.
- d. 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.
- e. The LFG H<sub>2</sub>S specification effectively limits the potential emissions of SAM and SO<sub>2</sub> from each CTG. Compliance with the LFG H<sub>2</sub>S specification of 200 ppmv shall be determined by H<sub>2</sub>S CEMS. Such representative LFG CEMS data will insure that the sulfur content of the LFG (a type of biogas) does not exceed (0.15 lb SO<sub>2</sub>/mmBtu) heat input limitation of 40 CFR 60, Subpart KKKK.
- 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. CEMS monitoring compliance shall in accordance with the 40 CFR 60, NSPS, Subpart KKKK for NO<sub>x</sub>.

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

**SECTION IV – EMISSION UNIT(S) SPECIFIC CONDITIONS**

**SUBSECTION D. SOLAR T-40 CTG (EU-017, 018 AND 019)**

**EXCESS EMISSIONS**

- 10. Definitions Related to Excess Emissions: 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.
- 11. 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 CEMS data. [Rule 62-210.700(4), F.A.C.]
- 12. 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 and 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<sub>x</sub> Emissions*: Excess NO<sub>x</sub> emissions based on the 4 hour block average standard shall be calculated in accordance with the NSPS Subpart KKKK provisions.

**TEST METHODS AND PROCEDURES**

- 13. Initial Compliance Tests: Each CTG shall be tested to demonstrate initial compliance with the emissions standards for CO, NO<sub>x</sub>, PM/PM<sub>10</sub> 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<sub>x</sub> 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.]
- 14. Annual Compliance Tests: During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), each CTG shall be tested to demonstrate compliance with the emissions standards for CO and opacity. Each CTG shall demonstrate compliance with the NO<sub>x</sub> 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.]
- 15. Test Requirements: 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.]
- 16. Test Methods: Required tests shall be performed in accordance with the following reference methods.

<b>Method</b>	<b>Description of Method and Comments</b>
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
7E	Determination of NO <sub>x</sub> 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.

**SECTION IV – EMISSION UNIT(S) SPECIFIC CONDITIONS**

**SUBSECTION D. SOLAR T-40 CTG (EU-017, 018 AND 019)**

Method	Description of Method and Comments
19	Determination of SO <sub>2</sub> Removal Efficiency and PM, SO <sub>2</sub> and NO <sub>x</sub> Emission Rates Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.

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]

**CONTINUOUS MONITORING REQUIREMENTS**

17. CEMS: The permittee shall install, calibrate, maintain and operate CEMS and a diluent monitor to measure and record the emissions of NO<sub>x</sub> from each CTG in a manner sufficient to demonstrate continuous compliance with the CEMS emission standards of this section. The monitoring systems 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<sub>x</sub> standard (and subject to the specified averaging period), the permittee shall notify the Compliance Authority (see Appendix CEMS of this permit).
- a. *NO<sub>x</sub> Monitor*: The NO<sub>x</sub> monitor shall be certified, operated, and maintained in accordance with the requirements of 40 CFR 75. Record keeping and reporting shall be conducted pursuant to Subparts F and G in 40 CFR 75. The RATA tests required for the NO<sub>x</sub> monitor shall be performed using EPA Method 20 or 7E in Appendix A of 40 CFR 60.
  - b. *Diluent Monitor*: The oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) content of the flue gas shall be monitored at the location where CO and NO<sub>x</sub> are monitored to correct the measured emissions rates to 15% oxygen. If a CO<sub>2</sub> monitor is installed, the oxygen content of the flue gas shall be calculated using F-factors that are appropriate for the fuel fired. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.

**OTHER MONITORING REQUIREMENTS**

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

**RECORDS AND REPORTS**

19. 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]
20. 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

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## 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.
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- § 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**

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§ 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 AAAAA**

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**NESHAP, SUBPART AAAAA FOR MUNICIPAL SOLID WASTE LANDFILLS**

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

[NESHAP, Subpart AAAAA](#)

## 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. **Circumvention**: 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. **VOC or OS Emissions**: 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. **General Visible Emissions**: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
9. **Unconfined Particulate Emissions**: 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

**SECTION IV. APPENDIX CC**  
**COMMON CONDITIONS**

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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. Records Retention: 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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### COMMON CONDITIONS

- 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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### COMMON CONDITIONS

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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**COMMON CONDITIONS**

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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.]



**SECTION IV. APPENDIX CCD**  
**COMMON CONTROL DEVICES - FLARES**

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**60.18 General control device requirements.**

- (a) **Introduction.** 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,  $V_{max}$ , 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,  $V_{max}$ , 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:

**SECTION IV. APPENDIX CCD**  
**COMMON CONTROL DEVICES - FLARES**

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$H_T$  = 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.

$$\text{Log}_{10} (V_{max}) = (H_T + 28.8) / 31.7$$

$V_{max}$  = 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).

## SECTION IV. APPENDIX CEMS

### CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) REQUIREMENTS

#### CEMS OPERATION PLAN

1. **CEMS Operation Plan:** The owner or operator shall create and implement a facility-wide plan for the proper installation, calibration, maintenance and operation of each CEMS required by this permit. The owner or operator shall submit the CEMS Operation Plan to the Bureau of Air Monitoring and Mobile Sources for approval at least 60 days prior to CEMS installation. The CEMS Operation Plan shall become effective 60 days after submittal or upon its approval. If the CEMS Operation Plan is not approved, the owner or operator shall submit a new or revised plan for approval.

*{Permitting Note: The Department maintains both guidelines for developing a CEMS Operation Plan and example language that can be used as the basis for the facility-wide plan required by this permit. Contact the Emissions Monitoring Section of the Bureau of Air Monitoring and Mobile Sources at (850)488-0114.}*

#### INSTALLATION, PERFORMANCE SPECIFICATIONS AND QUALITY ASSURANCE

2. **Timelines:**
  - a. **New and Existing Emission Units.** For new emission units, the owner or operator shall install each CEMS required by this permit prior to initial startup of the unit. The owner or operator shall conduct the appropriate performance specification for each CEMS within 90 operating 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.
3. **Installation:** All CEMS shall be installed such that representative measurements of emissions or process parameters from the facility are obtained. The owner or operator shall locate the CEMS by following the procedures contained in the applicable performance specification of 40 CFR part 60, Appendix B.
4. **Span Values and Dual Range Monitors:** The owner or operator shall set appropriate span values for the CEMS. The owner or operator shall install dual range monitors if required by and in accordance with the CEMS Operation Plan.
5. **Continuous Flow Monitor:** For compliance with mass emission rate standards, the owner or operator shall install a continuous flow monitor to determine the stack exhaust flow rate. The flow monitor shall be certified pursuant to 40 CFR part 60, Appendix B, Performance Specification 6.
6. **Diluent Monitor:** If it is necessary to correct the CEMS output to the oxygen concentrations specified in this permit's emission standards, the owner or operator shall either install an oxygen monitor or install a CO<sub>2</sub> monitor and use an appropriate F-Factor computational approach.
7. **Moisture Correction:** If necessary, the owner or operator shall determine the moisture content of the exhaust gas and develop an algorithm to enable correction of the monitoring results to a dry basis (0% moisture).

*{Permitting Note: The CEMS Operation Plan will contain additional CEMS-specific details and procedures for installation.}*
8. **Performance Specifications:** The owner or operator shall evaluate the acceptability of each CEMS by conducting the appropriate performance specification, as follows. CEMS determined to be unacceptable shall not be considered installed for purposes of meeting the timelines of this permit.
  - a. **NO<sub>x</sub> Monitor:** For a NO<sub>x</sub> monitor, the owner or operator shall conduct Performance Specification 2 of 40 CFR part 60, Appendix B.

## SECTION IV. APPENDIX CEMS

### CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) REQUIREMENTS

9. Quality Assurance: The owner or operator shall follow the quality assurance procedures of 40 CFR part 60, Appendix F.
  - a. NO<sub>x</sub> Monitors: The required RATA tests shall be performed using EPA Method 7E in Appendix A of 40 CFR part 60. NO<sub>x</sub> shall be expressed “as NO<sub>2</sub>.”
10. Substituting RATA Tests for Compliance Tests: Data collected during CEMS quality assurance RATA tests can substitute for annual stack tests, and vice versa, at the option of the owner or operator, provided the owner or operator indicates this intent in the submitted test protocol and follows the procedures outlined in the CEMS Operation Plan.

#### CALCULATION APPROACH

11. CEMS Used for Compliance: Once adherence to the applicable performance specification for each CEMS is demonstrated, the owner or operator shall use the CEMS to demonstrate compliance with the applicable emission standards as specified by this permit.
12. CEMS Data: Each CEMS shall monitor and record emissions during all periods of operation and whenever emissions are being generated, including during episodes of startups, shutdowns, and malfunctions. All data shall be used, except for invalid measurements taken during monitor system breakdowns, repairs, calibration checks, zero adjustments and span adjustments, and except for allowable data exclusions as per Condition 19 of this appendix.
13. Operating Hours and Operating Days: For purposes of this appendix, the following definitions shall apply. An hour is the 60-minute period beginning at the top of each hour. Any hour during which an emissions unit is in operation for more than 15 minutes is an operating hour for that emission unit. A day is the 24-hour period from midnight to midnight. Unless otherwise specified by this permit, any day with at least one operating hour for an emissions unit is an operating day for that emission unit.
14. Valid Hourly Averages: Each CEMS shall be designed and operated to sample, analyze and record data evenly spaced over the hour at a minimum of one measurement per minute. All valid measurements collected during an hour shall be used to calculate a 1-hour block average that begins at the top of each hour.
  - a. Hours that are not operating hours are not valid hours.
  - b. For each operating hour, the 1-hour block average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, there is insufficient data, the 1-hour block average is not valid, and the hour is considered as “monitor unavailable.”
15. Calculation Approaches: The owner or operator shall implement the calculation approach specified by this permit for each CEMS, as follows:
  - a. *Rolling 30-day average*. 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.
  - b. *Block 4-hour average*. Compliance shall be determined for each block averaging period by calculating the arithmetic average of all valid hourly averages occurring within that block averaging period. (Hours 0, 1, 2 and 4 are the first 4-hour block; hours 5, 6, 7 and 8 are the second 3-hour block; etc.)

## SECTION IV. APPENDIX CEMS

### CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) REQUIREMENTS

#### MONITOR AVAILABILITY

16. Monitor Availability: The quarterly excess emissions report shall identify monitor availability for each quarter in which the unit operated. Monitor availability for the CEMS shall be 95% or greater in any calendar quarter in which the unit operated for more than 760 hours. In the event the applicable availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving the required availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit.

#### EXCESS EMISSIONS

17. Definitions:
- 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* means the cessation of the operation of an emissions unit for any purpose.
  - c. *Malfunction* means 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.
18. 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.
19. Data Exclusion Procedures for SIP Compliance: As per the procedures in this condition, limited amounts of CEMS emissions data may be excluded from the corresponding compliance demonstration, provided that best operational practices to minimize emissions are adhered to and the duration of data excluded is minimized. The data exclusion procedures of this condition apply only to SIP-based emission limits.
- a. *Excess Emissions*. Data in excess of the applicable emission standard may be excluded from compliance calculations if the data are collected during periods of permitted excess emissions (for example, during startup, shutdown or malfunction). The maximum duration of excluded data is 2 hours in any 24-hour period, unless some other duration is specified by this permit. For the CEMS on the HRSG stacks at the OL facility, excess emissions of NO<sub>x</sub> during periods of startup, shutdown and malfunction cannot be excluded. This is to ensure that the 250 TPY emission limits for these pollutants are not exceeded which if they were would trigger PSD regulations.
  - b. *Limited Data Exclusion*. If the compliance calculation using all valid CEMS emission data, as defined in Condition 12 of this appendix, indicates that the emission unit is in compliance, then no CEMS data shall be excluded from the compliance demonstration.
  - c. *Event Driven Exclusion*. The underlying event (for example, the startup, shutdown or malfunction event) must precede the data exclusion. If there is no underlying event, then no data may be excluded. Only data collected during the event may be excluded.
  - d. *Reporting Excluded Data*. The data exclusion procedures of this condition are not necessarily the same procedures used for excess emissions as defined by federal rules. Quarterly or semi-annual reports required by this permit shall indicate not only the duration of data excluded from SIP compliance calculations but also the number of excess emissions as defined by federal rules.

## SECTION IV. APPENDIX CEMS

### CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS) REQUIREMENTS

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20. Notification Requirements: The owner or operator shall notify the Compliance Authority within one working day of discovering any emissions that demonstrate noncompliance for a given averaging period. Within one working day of occurrence, the owner or operator shall notify the Compliance Authority of any malfunction resulting in the exclusion of CEMS data. For malfunctions, notification is sufficient for the owner or operator to exclude CEMS data.

#### ANNUAL EMISSIONS

21. CEMS Used for Calculating Annual Emissions: All valid data, as defined in Condition 12 of this appendix, shall be used when calculating annual emissions.
- Annual emissions shall include data collected during startup, shutdown and malfunction periods.
  - Annual emissions shall include data collected during periods when the emission unit is not operating but emissions are being generated (for example, when firing fuel to warm up a process for some period of time prior to the emission unit's startup).
  - Annual emissions shall not include data from periods of time where the monitor was functioning properly but was unable to collect data while conducting a mandated quality assurance/quality control activity such as calibration error tests, RATA, calibration gas audit or RAA. These periods of time shall be considered missing data for purposes of calculating annual emissions.
  - Annual emissions shall not include data from periods of time when emissions are in excess of the calibrated span of the CEMS. These periods of time shall be considered missing data for purposes of calculating annual emissions.
22. Accounting for Missing Data: All valid measurements collected during each hour shall be used to calculate a 1-hour block average. For each hour, the 1-hour block average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, the owner or operator shall account for emissions during that hour using site-specific data to generate a reasonable estimate of the 1-hour block average.
23. Emissions Calculation: Hourly emissions shall be calculated for each hour as the product of the 1-hour block average and the duration of pollutant emissions during that hour. Annual emissions shall be calculated as the sum of all hourly emissions occurring during the year.

## SECTION 4. APPENDIX CF

### 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 CFR 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  
(Department’s database)

**CEMS:** continuous emissions monitoring system

**cfm:** cubic feet per minute

**BACT:** best available control technology

Okeechobee Landfill  
Landfill Gas to Energy Project

Air Permit No. 0930104-014-AC (PSD-FL-382)  
Okeechobee County

## SECTION 4. APPENDIX CF

### CITATION FORMATS AND GLOSSARY OF COMMON TERMS

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<b>CFR:</b> Code of Federal Regulations	<b>O<sub>2</sub>:</b> oxygen
<b>CO:</b> carbon monoxide	<b>Pb:</b> lead
<b>COMS:</b> continuous opacity monitoring system	<b>PM:</b> particulate matter
<b>DEP:</b> Department of Environmental Protection	<b>PM<sub>10</sub>:</b> particulate matter with a mean aerodynamic diameter of 10 microns or less
<b>Department:</b> Department of Environmental Protection	<b>PSD:</b> prevention of significant deterioration
<b>dscfm:</b> dry standard cubic feet per minute	<b>psi:</b> pounds per square inch
<b>EPA:</b> Environmental Protection Agency	<b>PTE:</b> potential to emit
<b>ESP:</b> electrostatic precipitator (control system for reducing particulate matter)	<b>RACT:</b> reasonably available control technology
<b>EU:</b> emissions unit	<b>RATA:</b> relative accuracy test audit
<b>F.A.C.:</b> Florida Administrative Code	<b>SAM:</b> sulfuric acid mist
<b>F.D.:</b> forced draft	<b>scf:</b> standard cubic feet
<b>F.S.:</b> Florida Statutes	<b>scfm:</b> standard cubic feet per minute
<b>FGR:</b> flue gas recirculation	<b>SIC:</b> standard industrial classification code
<b>F:</b> fluoride	<b>SNCR:</b> selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)
<b>ft<sup>2</sup>:</b> square feet	<b>SO<sub>2</sub>:</b> sulfur dioxide
<b>ft<sup>3</sup>:</b> cubic feet	<b>TPH:</b> tons per hour
<b>gpm:</b> gallons per minute	<b>TPY:</b> tons per year
<b>gr:</b> grains	<b>UTM:</b> Universal Transverse Mercator coordinate system
<b>HAP:</b> hazardous air pollutant	<b>VE:</b> visible emissions
<b>Hg:</b> mercury	<b>VOC:</b> volatile organic compounds
<b>I.D.:</b> induced draft	
<b>ID:</b> identification	
<b>kPa:</b> kilopascals	
<b>lb:</b> pound	
<b>MACT:</b> maximum achievable technology	
<b>MMBtu:</b> million British thermal units	
<b>MSDS:</b> material safety data sheets	
<b>MW:</b> megawatt	
<b>NESHAP:</b> National Emissions Standards for Hazardous Air Pollutants	
<b>NO<sub>x</sub>:</b> nitrogen oxides	
<b>NSPS:</b> New Source Performance Standards	
<b>O&amp;M:</b> operation and maintenance	



**SECTION IV. APPENDIX CTR**  
**COMMON TESTING REQUIREMENTS**

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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. Frequency of Compliance Tests: 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*.

**SECTION IV. APPENDIX CTR**  
**COMMON TESTING REQUIREMENTS**

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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. Test Reports: 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.

**SECTION IV. APPENDIX CTR**  
**COMMON TESTING REQUIREMENTS**

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- 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.]

## SECTION IV. APPENDIX GC

### 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.

## SECTION IV. APPENDIX GC

### 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.

**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 1 is a listing of the NO<sub>x</sub> limits from Subpart KKKK that apply to the OL LFGCP simple cycle CTG.

**Table 1. NO<sub>x</sub> Emission Limits for New Stationary Combustion Turbines<sup>1</sup>. Subpart KKKK of Part 60.**

<b>CT Type</b>	<b>CT Heat Input at Peak Load (HHV)</b>	<b>NO<sub>x</sub> Emission Standard</b>
New turbine firing fuels other than natural gas	<50 MMBtu/hour	42 ppmvd <sup>2</sup> at 15% oxygen
New turbine firing fuels other than natural gas	> 50 MMBtu/hour and ≤ 850 MMBtu/hour	74 ppmvd <sup>3</sup> at 15% oxygen

1. Only the portion of the table that includes the NO<sub>x</sub> requirements applicable to the OL LFGCP CTG.
2. NO<sub>x</sub> emission standard on a 4-hour block average basis that applies to Solar Centaur Model C-40 (3.5 MW) CTG.
3. NO<sub>x</sub> emission standard on a 4-hour block average basis that applies to Solar Titian Model T-130 (15 MW) CTG.

## SECTION IV. APPENDIX SC

### 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. Circumvention: 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 permittee 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. VOC or OS Emissions: 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) and 62-210.200(203), F.A.C.]
8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]
9. Unconfined Particulate Emissions: 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. Required Number of Test Runs: 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

**SECTION IV. APPENDIX SC**  
**STANDARD CONDITIONS**

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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. Calculation of Emission Rate: 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. Test Procedures: 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.



## SECTION IV. APPENDIX SC

### STANDARD CONDITIONS

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

15. Sampling Facilities: 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. Test Notification: 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. 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)(b), F.A.C.]
18. Test Reports: 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.

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**SECTION IV. APPENDIX SC**

**STANDARD CONDITIONS**

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- 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. Records Retention: 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. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by 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**

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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**

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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]

## Livingston, Sylvia

---

**From:** Livingston, Sylvia  
**Sent:** Tuesday, April 20, 2010 2:03 PM  
**To:** 'jvangessel@wm.com'  
**Cc:** 'abrams.heather@epa.gov'; 'forney.kathleen@epa.gov'; 'dee\_morse@nps.gov'; Anderson, Lennon; 'dbuff@golder.com'; Gibson, Victoria; Heron, Teresa; Linero, Alvaro; Walker, Elizabeth (AIR)  
**Subject:** OKEECHOBEE LANDFILL, INC. - BERMAN ROAD LANDFILL; 0930104-014-AC/ PSD-FL-382  
**Attachments:** 0930104-014-AC FPERMIT382.pdf

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 reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).*

**Click on the following link to access the documents:**

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/0930104.014.AC.F\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0930104.014.AC.F_pdf.zip)

**Owner/Company Name:** OKEECHOBEE LANDFILL, INC.

**Facility Name:** BERMAN ROAD LANDFILL

**Project Number:** 0930104-014-AC/ PSD-FL-382

**Permit Status:** FINAL

**Permit Activity:** CONSTRUCTION

**Facility County:** OKEECHOBEE

**Processor:** Teresa Heron/ Al Linero

The Bureau of Air Regulation 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>.

Project documents that are 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, Bureau of Air Regulation at (850)488-0114.

Sylvia Livingston  
Bureau of Air Regulation  
Division of Air Resource Management (DARM)  
Department of Environmental Protection  
850/921-9506  
[sylvia.livingston@dep.state.fl.us](mailto:sylvia.livingston@dep.state.fl.us)

## Livingston, Sylvania

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**From:** VanGessel, John [JVanGessel@wm.com]  
**Sent:** Tuesday, April 20, 2010 3:07 PM  
**To:** Livingston, Sylvania  
**Subject:** RE: OKEECHOBEE LANDFILL, INC. - BERMAN ROAD LANDFILL; 0930104-014-AC/ PSD-FL-382

I am able to access the documents. Thanks

---

**From:** Livingston, Sylvania [mailto:Sylvia.Livingston@dep.state.fl.us]  
**Sent:** Tuesday, April 20, 2010 2:03 PM  
**To:** VanGessel, John  
**Cc:** abrams.heather@epa.gov; forney.kathleen@epa.gov; dee\_morse@nps.gov; Anderson, Lennon; dbuff@golder.com; Gibson, Victoria; Heron, Teresa; Linero, Alvaro; Walker, Elizabeth (AIR)  
**Subject:** OKEECHOBEE LANDFILL, INC. - BERMAN ROAD LANDFILL; 0930104-014-AC/ PSD-FL-382

Dear Sir/ Madam:

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[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/0930104.014.AC.F\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0930104.014.AC.F_pdf.zip)

**Owner/Company Name:** OKEECHOBEE LANDFILL, INC.  
**Facility Name:** BERMAN ROAD LANDFILL  
**Project Number:** 0930104-014-AC/ PSD-FL-382  
**Permit Status:** FINAL  
**Permit Activity:** CONSTRUCTION  
**Facility County:** OKEECHOBEE  
**Processor:** Teresa Heron/ Al Linero

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Sylvia Livingston

## Livingston, Sylvia

---

**From:** Buff, Dave [DBuff@GOLDER.com]  
**To:** Livingston, Sylvia  
**Sent:** Tuesday, April 20, 2010 8:25 PM  
**Subject:** Read: OKEECHOBEE LANDFILL, INC. - BERMAN ROAD LANDFILL; 0930104-014-AC/  
PSD-FL-382

Your message was read on Tuesday, April 20, 2010 8:24:54 PM (GMT-05:00) Eastern Time (US & Canada).

## Livingston, Sylvia

---

**From:** Abrams.Heather@epamail.epa.gov  
**Sent:** Tuesday, April 20, 2010 2:23 PM  
**To:** Livingston, Sylvia  
**Subject:** Re: OKEECHOBEE LANDFILL, INC. - BERMAN ROAD LANDFILL; 0930104-014-AC/ PSD-FL-382

We received the documents.

Heather Abrams  
Air Permits Section  
U.S. EPA - Region 4  
61 Forsyth St. SW  
Atlanta, Georgia 30303

Phone: 404-562-9185

Fax: 404-562-9019

**From:** "Livingston, Sylvia" <Sylvia.Livingston@dep.state.fl.us>  
**To:** "jvangessel@wm.com" <jvangessel@wm.com>  
**Cc:** Heather Abrams/R4/USEPA/US@EPA, Kathleen Forney/R4/USEPA/US@EPA, "dee morse@nps.gov" <dee\_morse@nps.gov>, "Anderson, Lennon" <Lennon.Anderson@dep.state.fl.us>, "dbuff@golder.com" <dbuff@golder.com>, "Gibson, Victoria" <Victoria.Gibson@dep.state.fl.us>, "Heron, Teresa" <Teresa.Heron@dep.state.fl.us>, "Linero, Alvaro" <Alvaro.Linero@dep.state.fl.us>, "Walker, Elizabeth (AIR)" <Elizabeth.Walker@dep.state.fl.us>  
**Date:** 04/20/2010 02:03 PM  
**Subject:** OKEECHOBEE LANDFILL, INC. - BERMAN ROAD LANDFILL; 0930104-014-AC/ PSD-FL-382

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Owner/Company Name: OKEECHOBEE LANDFILL, INC.  
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Facility County: OKEECHOBEE  
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Sylvia Livingston  
Bureau of Air Regulation  
Division of Air Resource Management (DARM) Department of Environmental Protection  
850/921-9506  
[sylvia.livingston@dep.state.fl.us](mailto:sylvia.livingston@dep.state.fl.us)

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>> .

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole 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. [attachment "0930104-014-AC FPERMIT382.pdf" deleted by Heather Abrams/R4/USEPA/US]