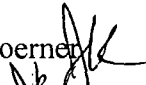




Florida Department of Environmental Protection

Memorandum

To: Jeff Koerner 
Through: Al Lino  
From: David Read/Teresa Heron
Date: June 20, 2011
Subject: Revised Draft Permit No. 0930104-018-AC (PSD-FL-382A)
Okeechobee Landfill Gas (LFG) to Energy Project Permit Modification

Attached for your review is a revised draft PSD air construction permit modification package for the LFG to energy project at the Waste Management Okeechobee Landfill. The revised package replaces the previous one that was distributed on April 6, 2011 and for which notice was not published by the applicant.

The attached Technical Evaluation and Preliminary Determination (TEPD) document provides a detailed description of the requested changes and is an addendum to the original TEPD issued for the project in 2010.

The original draft of this permit was issued on April 6, 2011 which was Day 72 on the permitting clock. The applicant never published the Public Notice. Consequently, the permitting clock has been stopped while this revised draft permit was negotiated with the applicant. The replacement of the draft permit with the revised draft permit restarts and then stops the clock again on Day 72.

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

Attachments

JFK/aal/dlr/tmh



Florida Department of Environmental Protection

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

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

Electronically Sent – Received Receipt Requested.

thawkins@wm.com

Mr. Tim Hawkins, Vice President
Waste Management, Inc. of Florida, South Area
2700 Wiles Road
Pompano Beach, Florida 33073

Re: Draft Air Permit No. 0930104-018-AC (PSD-FL-382A)
Okeechobee Landfill (OL)
Landfill Gas to Energy (LFGTE) Project Permit Modification

Dear Mr. Hawkins:

On October 12, 2010 you submitted an application for an air construction permit modification subject to the preconstruction review requirements of Rule 62-212.300, Florida Administrative Code.

The purpose of the project is to modify the original construction permit 0930104-014-AC (PSD-FL-382) that authorized construction of a LFGTE plant including a landfill gas desulfurization plant, combustion turbines and open flares. The OL is located at 10800 Northeast 128th Avenue, Okeechobee, Florida.

The original Draft Permit and associated documents that were transmitted by the cover letter dated April 6, 2011 are hereby withdrawn and replaced by those enclosed herewith.

Enclosed are the following documents: Written Notice of Intent to Issue Air Permit Modification; Public Notice of Intent to Issue Air Permit Modification; Addendum to the original Technical Evaluation and Preliminary Determination; and the Draft Permit Modification with Appendices.

The Public Notice of Intent to Issue Air Permit Modification is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. If you have any questions, please contact Alvaro Linero at 850/717-9076 or Teresa Heron at 850/717-9082.

Sincerely,

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

6-20-11
(Date)

JFK/aal/dlr/th
Enclosures

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT MODIFICATION

*In the Matter of an
Application for Air Permit Modification by:*

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

Draft Permit No. 0930104-018-AC
PSD-FL-382A.
Landfill Gas to Energy Project
Permit Modification
Okeechobee Landfill
Okeechobee County

Authorized Representative:

Mr. Tim Hawkins, Vice President, WMF, South Area

Facility Location: The Okeechobee Landfill is located at 10800 Northeast 128th Avenue, Okeechobee, Florida.

Project: This project is to modify certain conditions of air construction permit No. 0930104-014-AC / PSD-FL-382 issued on April 19, 2010.

Details of the project are provided in the application and the enclosed addendum to the original Technical Evaluation and Preliminary Determination.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212, F.A.C.. The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Bureau of Air Regulation's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Bureau of Air Regulation's phone number is 850/717-9000.

The previous written notice and accompanying documents transmitted on April 6, 2011 are hereby withdrawn and replaced with the present revised notice and accompanying documents.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Modification, the Addendum to the original Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above.

Notice of Intent to Issue Air Permit Modification: The Permitting Authority gives notice of its intent to issue an air permit modification to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit Modification in accordance with the conditions of the proposed Draft Permit Modification unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit Modification (Public Notice). 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

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT MODIFICATION

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 modification pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit Modification. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. In addition, if a public meeting is requested within the 14-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received comments result in a significant change to the Draft Permit Modification, the Permitting Authority shall revise the Draft Permit Modification and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/245-2241; Fax: 850/245-2303). Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit Modification. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within fourteen 14 days of receipt of this Written Notice of Intent to Issue Air Permit Modification, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

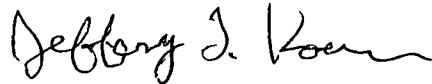
A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT MODIFICATION

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit Modification. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida



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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Air Permit Modification package (including the Written Notice of Intent to Issue Air Permit Modification, the Public Notice of Intent to Issue Air Permit Modification, the addendum to the original Technical Evaluation and Preliminary Determination and the Draft Permit Modification 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

June 20, 2011 to the persons listed below.

Heather Abrams, U.S. EPA Region 4: abrams.heather@epa.gov
Kathleen Forney, U.S. EPA Region 4: forney.kathleen@epa.gov
Dee Morse, National Park Service, Denver CO: dee_morse@nps.gov
Lennon Anderson, DEP SED: lennon.anderson@dep.state.fl.us
David Buff, P.E., Golder Associates, Inc.: dbuff@golder.com
Victoria Gibson, DEP BAR, Reading File: 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.

 6/20/11
(Clerk) (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT MODIFICATION

Florida Department of Environmental Protection
Division of Air Resource Management, Bureau of Air Regulation
Draft Permit Modification No. 0930104-018-AC / PSD-FL-382A

Okeechobee Landfill, Inc.
Okeechobee County, Florida

Applicant: The applicant for this project is Okeechobee Landfill, Inc. The applicant's authorized representative and mailing address is: Tim Hawkins, Vice President, South Area, Waste Management, Inc. of Florida, 2700 Wiles Road, Pompano Beach, Florida 33073.

Facility Location: The Okeechobee Landfill (OL) is located in Okeechobee County at 10800 Northeast 128th Avenue, Okeechobee, Florida.

Project: This project is to modify certain conditions of air construction permit No. 0930104-014-AC / PSD-382 originally issued on April 19, 2010 pursuant to the rules for the Prevention of Significant Deterioration of Air Quality (PSD). The original permitted project involves the construction and installation of the following equipment for a Landfill Gas-to-Energy (LFGTE) plant to process and combust up to 13,500 standard cubic feet per minute of LFG at the OL: a LFG desulfurization plant (GDP) to remove hydrogen sulfide from the 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 open flares. The original project review included a determination of Best Available Control Technology (BACT) pursuant to the PSD rules.

There are no emissions increases as a result of this permit modification and a new ambient air quality analysis and BACT review are not required. The details regarding the original permitting action and the present request are available at the following web site:

www.dep.state.fl.us/Air/emission/construction/okeechobee.htm .

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212, F.A.C. The proposed project is not exempt from air permitting requirements and an air permit modification is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Bureau of Air Regulation's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Bureau of Air Regulation's phone number is 850/717-9000.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit Modification, the addendum to the original Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available at the web site given above.

Notice of Intent to Issue Air Permit Modification: The Permitting Authority gives notice of its intent to issue an air permit modification to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit Modification in

(Public Notice to be Published in the Newspaper)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT MODIFICATION

accordance with the conditions of the proposed Draft Permit Modification unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

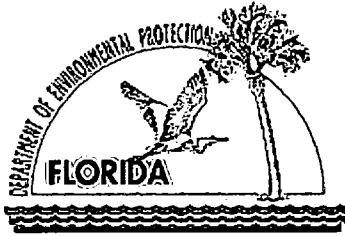
Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit Modification for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If timely received comments result in a significant change to the Draft Permit Modification, the Permitting Authority shall revise the Draft Permit Modification and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/245-2241; Fax: 850/245-2303). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit Modification. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.



**ADDENDUM TO
TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

APPLICANT

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

Okeechobee Landfill
ARMS Facility ID No. 0930104

PROJECT

Draft Permit Modification No. PSD-FL-382A
Project No. 0930104-018-AC
Landfill Gas to Energy Project Permit Modification

COUNTY

Okeechobee County

PERMITTING AUTHORITY

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

June 20, 2011

(Addendum to Document issued April 19, 2010)

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. GENERAL PROJECT INFORMATION

1.1 Facility Description and Location

The Okeechobee Landfill (OL) is located in Okeechobee County. The main entrance is approximately 3.5 miles north of State Road (SR) 70 at 10800 Northeast 128th Avenue. The landfill has a Standard Industrial Classification Code (SIC) of No. 4953. The UTM coordinates are Zone 17; 530.28 kilometers (km) East and 3023.96 km North. The location of Okeechobee County is shown in Figure 1 below. The location of the landfill within Okeechobee County is shown in Figure 2.

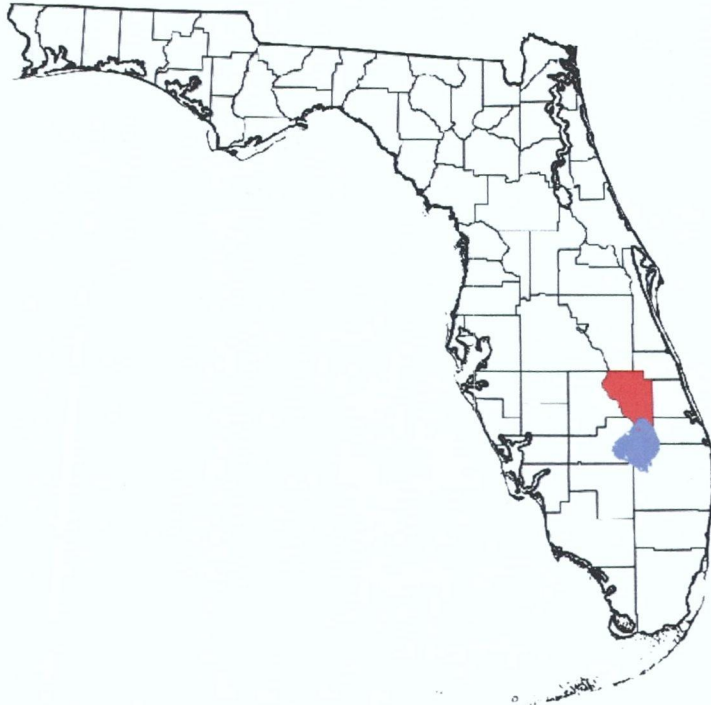


Figure 1 - Okeechobee County, Florida



Figure 2 - Location of Okeechobee Landfill

The landfill is operated by Okeechobee Landfill, Inc. (OLI), a Waste Management Company. Communications regarding this project are through Waste Management, Inc. (WMI). The total OL area comprises approximately 847 acres within 4,150 acres owned by the applicant.

Figure 3 below is a depiction of the present OL configuration. There are two existing enclosed flares and one open flare that regularly operate. Two open flares that were authorized pursuant to previous consent orders are indicated. One was not installed and the one installed no longer operates.

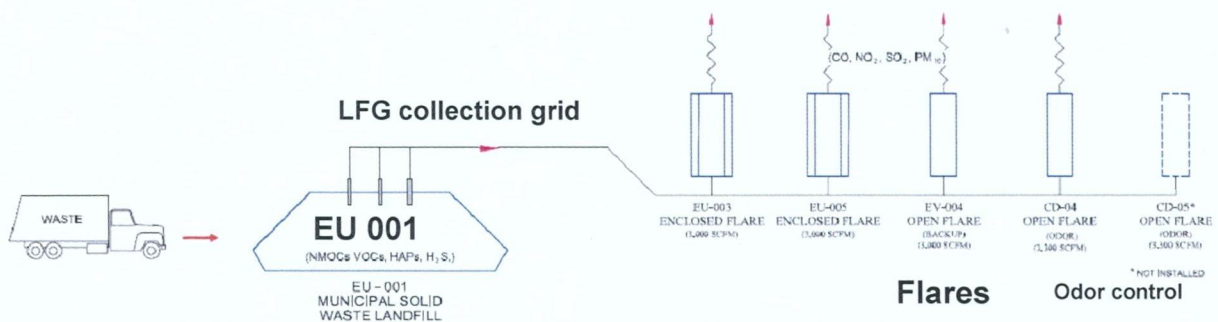


Figure 3 – Process Flow Diagram of Existing Configuration at the OL

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Figures 4, 5 and 6 were taken at the landfill circa 2006. One relocatable odor control flare was operational and was moved as-needed around the landfill to cope with accelerated decay of waste following several highly active hurricane seasons.



Figure 4 – Landfill



Figure 5 – Enclosed Flare

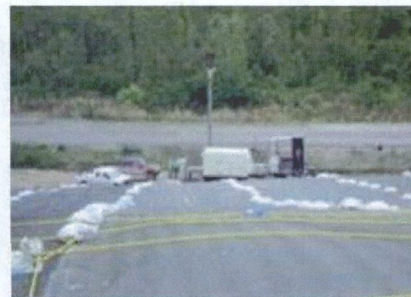


Figure 6 – Relocatable Odor Flare

1.2 Previously Authorized Project

On April 19, 2010 the Florida Department of Environmental Protection (FDEP) issued an air construction permit pursuant to the rules for the Prevention of Significant Deterioration of Air Quality (PSD). The original 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.

The issued permit (DEP No. 0930104-014-AC/PSD-FL-382) is accessible at the following link:

www.dep.state.fl.us/Air/emission/construction/okeechobee/FPERMIT382.pdf

The original project triggered review under the PSD rules for particulate matter (PM/PM₁₀), nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂) and visible emissions (VE). The Technical Evaluation and Preliminary Determination (TEPD), including determinations of Best Available Control Technology (BACT) for these pollutants, is accessible at the following link:

www.dep.state.fl.us/Air/emission/construction/okeechobee/TECH382.pdf

The future near-term and the long-term configurations including all flares and CTG are shown in Figure 7. The LFG will be directed to a GDP, where it will be treated prior to flaring or use as fuel in the described CTG. The EU designated in red in the diagram constitutes the near-term project.

The equipment in this project will be installed over a period of several years to decades depending upon the rate of solid waste disposal and gas generation. The GDP will be initially constructed of sufficient size to treat the LFG produced throughout the life and closure of the OL. The LFGTE plant will be constructed in steps beginning with a single 15 megawatts (MW) Solar Model T-130 CTG and three 3.5 MW Solar Model C-40 CTG. Over the life of the development, the applicant anticipates installing as many as 15 C-40 CTG or their equivalents. The future models may vary based on the future products available from several manufacturers. With a LFGTE plant, most of the flares operate as backup to the CTG while the remaining flares burn incremental amounts of LFG at least until additional CTG are added.

1.3 Status of Project

As of late January 2011, OLI had completed installation of three new open flares and extensive piping to deliver preconditioned raw LFG to the GDP. OLI decided to install the biological process called the Paques/THIOPAQ[®] rather than the chemical process called LO-CAT[®]. Figures 8 and 9 document the status of the construction to date. The three new flares (not yet operational) are visible in Figure 9. The existing enclosed flares are visible in the distant background and will continue to operate (along with the existing open flare) at least until construction of the GDP is completed.

For reference, the expected high LFG generation rate predicted when the original project was proposed did not materialize and present flows and hydrogen sulfide (H₂S) concentration are much less than they were in 2004-2007.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

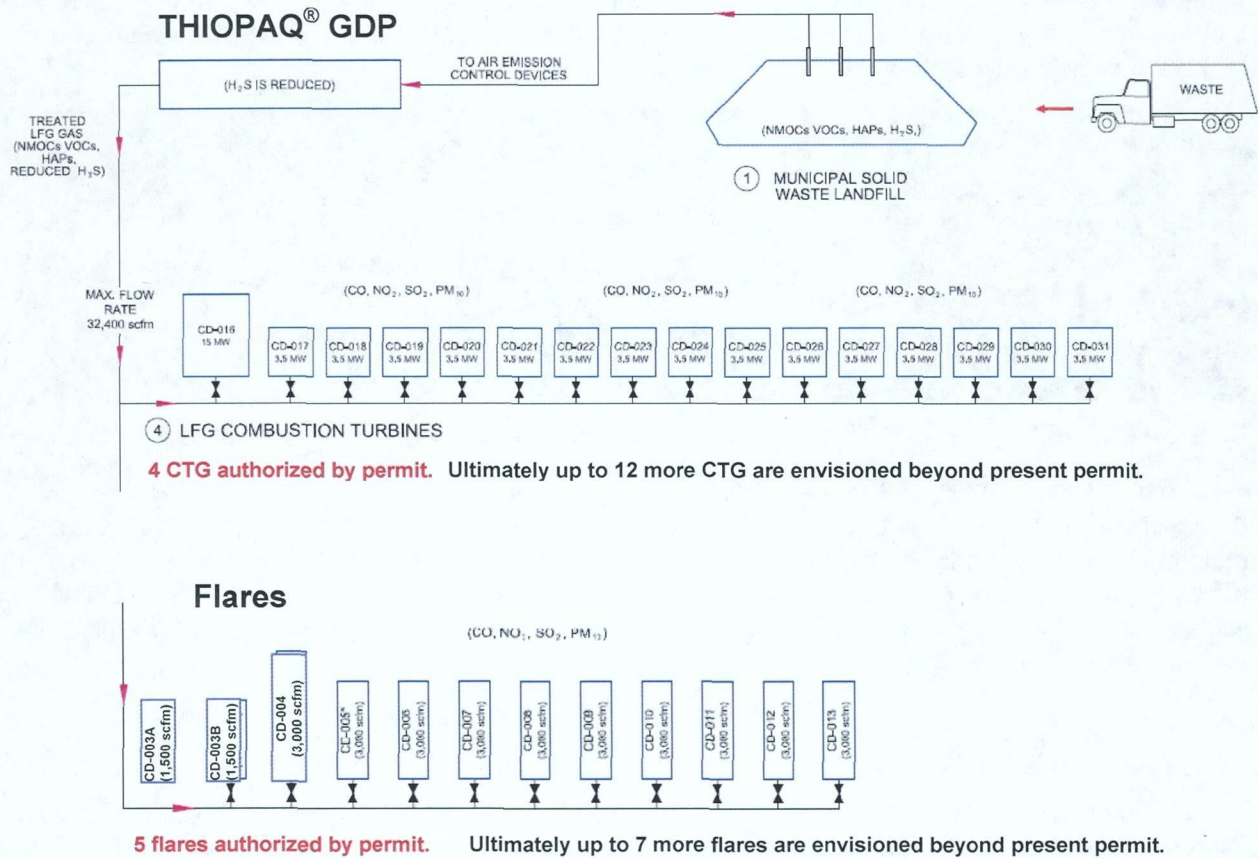


Figure 7 – Process Diagram of Future LFG Collection and Control System including LFGTE Plant



Figure 8 – Conditioned LFG Piping



Figure 9 – Piping to Planned GDP, New Open Flares

2. PERMIT MODIFICATIONS

2.1 Overall Description of Requested Permit Modification

Most of the requested changes were initially submitted as comments by OLI pursuant to the public notice and comment period during the initial permitting of the project. The comments are accessible at the following link: www.dep.state.fl.us/Air/emission/construction/okeechobee/L033010_505.pdf

The referenced comments were addressed in the Final Determination (FD) document included in the Final Permit package for Permit No. 0930104-014-AC (PSD-FL-382). Many of the requests submitted by OLI as comments could not be considered without a requirement for a new public notice.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The Department advised that it would entertain such requests through a future permit modification. The FD document is accessible at: www.dep.state.fl.us/Air/emission/construction/okeechobee/FDETER382.pdf

OLI submitted a permit modification application on October 12, 2010. No PSD regulated air emissions were expected to increase as a result of the permit modification request. Consequently, no air modeling was submitted and a new BACT determination is not required.

The permit modification application is accessible at:

www.dep.state.fl.us/Air/emission/construction/okeechobee/00005302.pdf

The changes requested by OLI, can be grouped into four categories. These include:

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

The key changes by category requested by OLI are paraphrased below in *italic format* and followed by the Department's analysis or determination. The Department's changes are shown in ~~strikethrough~~ and underline format in the attached draft permit modification.

2.2 Project Schedule and Facility Description

- ***Section I, General Information, New Emission Unit (EU) Descriptions:*** *OLI requests that in the second paragraph of this section, the landfill sizes be corrected from 208 acres to 309 acres and from 847 acres to 948.*

Department Determination: The Department will make the requested changes.

Other Department Changes: The Department is updating the EU Identification Numbers (ID Nos.) in the permit to correspond to the ID Nos. assigned by the Department's Air Resource Management System (ARMS). The renumbering changes are shown in the attached draft permit. The following table describes the EU at the facility after shut down of existing or previously authorized flares (EU 003 through EU 007) and implementation of the near-term LFGTE project.

EU ID No.	Emission Unit Description
001	Municipal solid waste landfill with LFG Collection System and GDP.
008	New open flare with a capacity of 1,500 standard cubic feet per minute (scfm).
009	New open flare with a total capacity of 3,000 scfm.
010	New open flare with a total capacity of 3,000 scfm.
011	New open flare with a total capacity of 3,000 scfm.
012	New open flare with a total capacity of 3,000 scfm.
013	One 15 MW Model Solar Titan 130 (T-130) CTG.
014	Three 3.5 MW Model Solar Centaur 40 (C-40) CTG.
015	Three 3.5 MW Model Solar Centaur 40 (C-40) CTG.
016	Three 3.5 MW Model Solar Centaur 40 (C-40) CTG.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

- **Conditions II.7 and III.A.1, Installation GDP Required:** *OLI requests extension of the January 1, 2012 deadline to complete the GDP portion of the project to allow for unseen construction delays and allow a start-up “shake out” period.*

Department Determination: The Department will make the requested change pursuant to the following rationale.

In the previous permit, the Department required, on the basis of good cause, the installation at an early date of the GDP to treat LFG prior to combustion or flaring whether or not OLI completes the LFGTE project. The purpose is to insure that the applicant installs controls following earlier expansion and flaring projects that the Department determined triggered PSD and a requirement for the installation of BACT.

The present deadline of December 31, 2011 was set to insure the GDP is installed at an early date and under the assumption that OLI would install the chemical process called LO-CAT[®]. With which it has experience such as at the Central Disposal Sanitary Landfill (CDSL) in Broward County. Instead, OLI will install the biological process called the Paques THIOPAQ[®].

The Department documented that construction of the GDP project is actually underway during a visit to the site in January 2011. Additional time could be required for initial startup and conditioning of the bacteria that consume H₂S. The Department will extend the deadline to June 30, 2012 as requested to install and operate the GDP.

- **Section III.A, EU ID No.1, OL Description:** *OLI requests deletion of the statements regarding the closure and opening dates for the Berman Road Landfill and the Clay Farm Landfill. The dates are subject to revision at any time and are not accurate.*

Department Determination: The Department concurs and notes that the Berman and Clay Farm Landfills are regulated by the air program as a single landfill (the OL). The variable closure and opening dates for individual parts of the OL are not necessary in the air construction permit and will be deleted.

2.3 Operational, Monitoring, Recordkeeping and Reporting for GDP and Flares

- **Condition III.A.9, GDP Reports and Records:** *OLI requests a quarterly or semi-annual reporting requirement in lieu of monthly, which is consistent with many other permits.*

Department Determination: The Department agrees that the GDP reports and records can be submitted on a quarterly basis rather than a monthly basis and will change the permit condition language accordingly.

- **Condition III.B.1, Flares Installation and Construction/Presence of Pilot Flames:** *OLI requests removal of the requirement for continuous pilots. The OL will have automatic startup/shutdown sequences that include the starting of the pilot flame which will use liquid propane as a fuel source. Therefore, the pilot flame will be automatically started whenever LFG is directed to the flare. The pilot flame will be extinguished once the main flame is confirmed as determined by the main flame thermocouple.*

Department Determination: The Department will replace the requirements related to pilot flames with the applicable monitoring requirements given in 40 Code of Federal Regulations (CFR) Part 60, Subpart WWW – Standards of Performance for Municipal Waste Landfills. [Link to Subpart WWW](#)

The specific section applicable to pilot flames is §60.756, Monitoring of Operations. §60.756(c) relates to use of open flares used to satisfy the Subpart WWW requirement to route all the collected gas to a control system. §60.756(c) states:

- (c) Each owner or operator seeking to comply with §60.752(b)(2)(iii) using an open flare shall install, calibrate, maintain, and operate according to the manufacturer’s specifications the following equipment:

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- (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.

- **Condition III.B.3, Shutdown of Existing Flares:** *OLI requests that the requirement to submit a flare shutdown plan be removed as it adds unnecessary burden on OLI.*

Department Determination: This issue is moot because the flare shutdown plan was received and approved by the Department's Southeast District Office.

- **Conditions III.B., 10, 11, 13, and 14 (all related to Flare Testing and Monitoring):** *OLI requests removal of: flare flame temperature measurement because it is not feasible to measure on an open flare; visual inspection of the flares on a daily basis; monthly inspection and monitoring requirements; quarterly maintenance requirements; and requirement for a fire alarm or an auto dialer.*

Department Determinations

B.10, Continuous Monitoring Devices: The Department will replace the temperature monitoring requirement with flame presence and rely on §60.756(c) as described in the previous discussion. Those requirements were already listed in Condition III.B.10. The basis in §60.756(c) will be more specifically cited. For the reasons cited in B.14, Flare Malfunctions and Emergencies below, the Department will also remove the requirements of a fire alarm or an auto dialer.

B.11, Flame Presence Visual Inspection Monitoring: The Department will remove the term "visual" as requested and incorporate into the condition the requirements §60.758(c)(4), Recordkeeping Requirements.

§60.758(c)(4) states:

- (c) Except as provided in §60.752(b)(2)(i)(B), each owner or operator of a controlled landfill subject to the provisions of this subpart shall keep for 5 years up-to-date, readily accessible continuous records of the equipment operating parameters specified to be monitored in §60.756 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.
- (4) Each owner or operator seeking to comply with the provisions of this subpart by use of an open flare shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under §60.756(c), and up-to-date, readily accessible records of all periods of operation in which the flame or flare pilot flame is absent.

B.13, Inspection and Maintenance of the Flares: The inspection and monitoring requirements contained in 40 CFR 60, Subparts WWW and 40 CFR 63, Subpart AAAA National Emission Standards for Hazardous Air Pollutants (NESHAP): Municipal Solid Waste Landfills are sufficient for the purposes of this condition and the Department will remove the additional language. [Link to Subpart AAAA](#)

B.14, Flare Malfunctions and Emergencies: The Department will remove the requirements for a fire alarm or auto dialer and refer to 40 CFR 60, Subpart WWW and 40 CFR 63, Subparts A and AAAA. Further reporting requirements are included in the facility Title V operation permit, Appendix TV 6.

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By and large, the requirements in Subpart AAAA refer back to Subpart WWW. However, the requirement for a Startup, Shutdown and Malfunction (SSM) plan is given in Subpart AAAA at §63.1955, Standards (What requirements must I meet) accessible at the above link. The specific requirement for a SSM plan is §63.1955(c) which states:

- (c) For approval of collection and control systems that include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions, you must follow the procedures in 40 CFR 60.752(b)(2). If alternatives have already been approved under 40 CFR part 60 subpart WWW or the Federal plan, or EPA approved and effective State or tribal plan, these alternatives can be used to comply with this subpart, except that all affected sources **must comply with the SSM requirements in Subpart A of this part as specified in Table 1 of this subpart** and all affected sources must submit compliance reports every 6 months as specified in §63.1980(a) and (b), including information on all deviations that occurred during the 6-month reporting period. Deviations for continuous emission monitors or numerical continuous parameter monitors must be determined using a 3 hour monitoring block average.

The SSM requirements in Subpart AAAA refer back to 40 CFR 63, Subpart A – General Provisions. This condition subtitle will be revised to indicate the SSM plan.

Link to Subpart A

The SSM requirements in Subpart A are given at §63.6, Compliance with Standards and Maintenance Requirements.

The specific section is §63.6(e)(3) which states:

- (3) SSM plan. (i) The owner or operator of an affected source must develop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of SSM; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. The SSM plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard. This plan must be developed by the owner or operator by the source's compliance date for that relevant standard. The purpose of the SSM plan is to:
- (A) Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;
 - (B) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and
 - (C) Reduce the reporting burden associated with periods of SSM (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).
- **Condition III.B.19, Records (Flare Events):** *OLI requests that the permit reference the SSM required by Subparts A and AAAA instead of the permit requirement to “record in a written log the duration of each flare event and the reason for flaring”. Also to remove references to Rule 62-4.070 (3) F.A.C.*

Department Response: The Department will modify this condition to include reference to 40 CFR 63, Subparts A and AAAA and the required SSM plan. There is no reason to remove the reasonable assurance rule reference.

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2.4 Purpose and Restrictions on Open Flares

- **Previous Final Determination and Permit BACT for Flares:** *OLI does not agree with the Department's assessment in the Final Determination (Department response to OLI comments on draft permit) that BACT requires enclosed combustion devices such as CTG or enclosed flares. In the letter dated April 7, 2009, OLI explained to the Department why open flares are BACT for operation with CTG compared to enclosed flares. Open flares are favored over enclosed flares for operation with gas turbines and that is why OLI proposed the open flares.*

Department Determination: The Department accepted the installation of open flares within the project PSD review and BACT determination under the premise that all or most of the flare capacity would be used as back up to enclosed combustion devices, namely CTG. If CTG were not proposed, the Department would have specified enclosed flares as BACT rather than open flares (and no CTG). The main reasons are that enclosed flares destroy non-methane organic compounds (NMOC) and CO more effectively (based on refractory heating) and their design is compatible with emission measurement.

- **Conditions III.B.1 and B.5, Flares Installation and Construction/Restricted Operation:** – *The flares have a capacity of 13,500 standard cubic feet per minute (scfm) whereas the CTG have a capacity of 9,500 scfm. The OL subject to Subpart WWW of which §60.752(b)(2)(iii) requires the operator to "route all the collected gas to a control system". The design capacity must be present to flare all of the LFG in case the CTG are off-line. This should not be interpreted that flares are required as backup devices for the CTG, but instead as an alternate method of operation.*

OLI requests that the operation restriction (III.B.5) for the flares (to operate only) when the CTG are unavailable be removed. To comply with the Subpart WWW requirements, the flares should be allowed to operate at any time, not just when the CTG are unavailable. When all CTG are available, the total capacity of the CTG will be less than the landfill design capacity. Therefore, the flares must be allowed to operate at all times to combust the excess LFG. There will be equal or lower emissions of all pollutants when all flares are operating instead of all CTG plus some flares operating.

Department Analysis: The full requirement is to: Route all the collected gas to a control system that complies with the requirements in either paragraph (b)(2)(iii)(A), (B) or (C) of this section.

- (A) An open flare designed and operated in accordance with §60.18 except as noted in §60.754(e);
- (B) A control system designed and operated to reduce non-methane organic compounds (NMOC) by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in §60.754(d).
 - (1) If a boiler or process heater is used as the control device, the landfill gas stream shall be introduced into the flame zone.
 - (2) The control device shall be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in §60.756;
- (C) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of paragraph (b)(2)(iii)(A) or (B) of this section.

The restriction in Condition III.B.5 is as follows: 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.

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Installed flare capacity will initially be greater than CTG capacity and may at different times in the future be greater than CTG capacity. Thus, for at least some of the time, some of the flare capacity will comprise part of or the entire control system rather than serve as back up to the CTG.

Department Determination: The Department will not remove the references to the open flares as back up flares but will remove the restrictions that limit their operation to when CTG are unavailable. It is clear that OLI intends to install CTG having already initiated construction on an expensive GDP.

2.5 Emission and Fuel Monitoring.

- **Condition III.A.8, Hydrogen Sulfide (H₂S) Continuous Emission Monitoring System (CEMS):** OLI requests removal of the requirement for a H₂S-CEMS to monitor LFG after it is processed by the GDP and before it is combusted in the CTG or the backup flares. OLI believes a H₂S-CEMS is very costly (estimated at \$150,000). OLI proposes instead to use the procedures developed for determining Total Sulfur (TS) content in gaseous fuels (used in CTG) as described in 40 Code of Federal Regulations (CFR), Part 60, Subpart GG – Standards of Performance for Stationary Gas Turbines [40 CFR 60.335(b)(10)] - Sulfur Content of Fuel Combusted in CTG.

Department Analysis: The requirements from Subpart GG are as follow:

The treated LFG will be combusted primarily in CTG subject to 40 CFR 60, Subpart KKKK - Standards of Performance for Stationary Combustion Turbines (that commenced construction after February 18, 2005) rather than 40 CFR 60, Subpart GG. The procedure required (as an alternative to SO₂ monitoring) by Subpart KKKK is described in §60.4415 as follows:

- (1) If you choose to periodically determine the sulfur content of the fuel combusted in the turbine (i.e. in lieu of testing for SO₂), a representative fuel sample would be collected following American Society for Testing and Materials (ASTM) D5287 (incorporated by reference, see §60.17) for natural gas or ASTM D4177 (incorporated by reference, see §60.17) for oil. Alternatively, for oil, you may follow the procedures for manual pipeline sampling in section 14 of ASTM D4057 (incorporated by reference, see §60.17). The fuel analyses of this section may be performed either by you, a service contractor retained by you, the fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using:
 - (ii) For gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17).

The cost information developed by OLI was based on a H₂S-CEMS. OLI proposes instead to use manual fuel monitoring. A H₂S Continuous Fuel Monitor (H₂S-CFM) would accomplish the same purpose as intended by the H₂S-CEMS and at a much lower price. Such H₂S-CFM are common and there are at least two examples of such instruments at South Florida landfills. Total Sulfur CFM (TS-CFM) compatible with the analytical procedures described within Subpart KKKK are also available.

Figure 10 shows a gas chromatograph (GC) – based ultraviolet system used to measure H₂S concentrations from the LOCAT[®] at the Waste Management Central Disposal Sanitary Landfill (CDSL) in Pompano Beach. It was installed in the 1990s. Figure 11 shows the new H₂S-CFM installed at the Brevard Landfill GTE facility. This analyzer was installed in 2009 at a cost of approximately \$50,000 including training. According to the Brevard County representative, the equipment included installation, training and a complement of spare parts. The unit is housed within an existing building and in its own heated panel.

The GC located at the CDSL is a much older instrument. Typical output is shown in Figure 12 below. At the time the measurement was taken, a H₂S value of 39 ppm was recorded from the LOCAT[®] GDP at the CDSL. The Department's purpose was to achieve at least a similar level of monitoring for the OL LFGTE project (that triggered PSD) as accomplished at the CDSL and at the Brevard Landfill.

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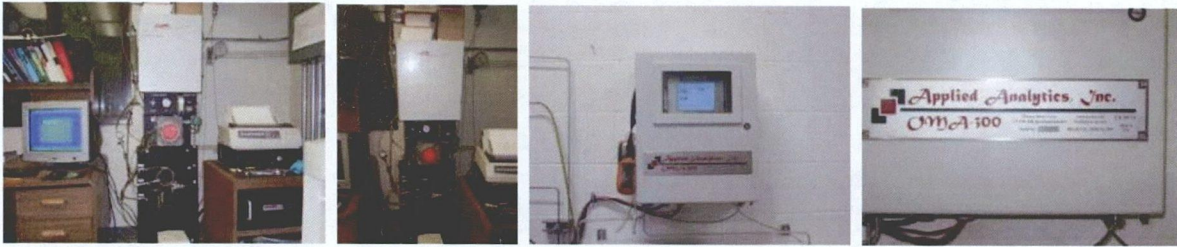


Figure 10- Gas Chromatograph at CDSL Figure 11- Ultraviolet Spectroscopy Instrument

Analysis	
Date-Time: 03/30/10 14:54	Analysis Time: 60 Cycle Time: 75
Stream: 1 Stream 1	Mode: ANLY Cycle Start Time: 14:53
Analyzer: 24877	Strm Seq:1
Company: Waste Management of North America	
SN: 385604	
Component Name	Mole Percent
H2S	38.6 PPM
TOTALS	38.6 PPM
'*' indicates user-defined components	
Base Pressures	14.73000

Average Molecular Wgt.	= 0.00
Analysis	
Date-Time: 03/30/10 14:56	Analysis Time: 60 Cycle Time: 75
Stream: 1 Stream 1	Mode: ANLY Cycle Start Time: 14:55
Analyzer: 24877	Strm Seq:1
Company: Waste Management of North America	
SN: 385864	
Component Name	Mole Percent
H2S	38.2 PPM
TOTALS	38.2 PPM
'*' indicates user-defined components	
Base Pressures	14.73000

Average Molecular Wgt.	= 0.00

Figure 12 - H₂S Data Collected at CDSL at 14:55 on March 30, 2010.

According to information submitted by OLI, approximately 97% of all sulfur from the GDP will be in the form of H₂S. Because Subpart KKKK requires SO₂ emission monitoring or TS (in lieu of SO₂ monitoring), a H₂S-CFM will not suffice for fuel monitoring of a CTG subject to Subpart KKKK. Instead it would be better to install a TS-CFM that will meet the compliance requirements of both the GDP and the CTG. Such monitors are available and comply with the TS methods given in Subpart GG and Subpart KKKK such as ASTM D6667 (in lieu of SO₂ testing).

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The Department obtained a budgetary cost estimate from Teledyne for a TS-CFM. Their estimate is \$50,000 if located inside a building and \$55,000 if located outside. Interestingly, their H₂S-CFM would cost an additional \$10,000 as TS is the easier (and actually the better) parameter to measure.

The present BACT limit is 200 ppmv of H₂S for which compliance would be demonstrated by an H₂S-CFM. Since the Department limit is based on H₂S and this pollutant comprises at least 95% of TS, an equivalent BACT limit would be 210 ppmv of TS.

Following is a conversion to express this limit in terms of the Subpart KKKK limit which is 0.15 pounds of SO₂ per million British thermal units of heat input (lb SO₂/mmBtu):

$$(210 \text{ } \text{f}^3 \text{ TS/million } \text{f}^3 \text{ of LFG}) \times (32 \text{ lb S/lb-mol TS}) \times (1 \text{ } \text{f}^3 \text{ LFG/500 Btu}) \times (\text{lb-mol TS}/379 \text{ } \text{f}^3 \text{ TS}) \\ = 0.0355 \text{ lb S/mmBtu} = 0.071 \text{ lb SO}_2/\text{mmBtu} < 0.15 \text{ lb/mmBtu} = \text{Subpart KKKK limit.}$$

Department Determination: The permit language of the original PSD permit will be changed include an alternative TS limit of 210 ppmv in the treated gas from the GDP (fuel to the CTG) on a 30-day basis demonstrated by a TS-CFM.

For the CTG, the applicant must comply with the Subpart KKKK limit of 0.15 lb SO₂/mmBtu and can demonstrate compliance by fuel monitoring techniques given in 40 CFR 60, Subpart KKKK (e.g. an ASTM D6667 compliant TS-CFM).

Permit language also will be modified to allow daily sampling of the LFG H₂S concentration per the protocol submitted by the applicant to be used as a backup when the H₂S-CFM (if used) is not available. Back up fuel monitoring methods for the CTG must comply with the procedures given in § 60.4360 and § 60.4370 of NSPS 40 CFR 60, Subpart KKKK.

- **Condition III.A.10., H₂S LFG Concentration Exceedance:** OLI requests that the reference to H₂S-CEMs be deleted from the 4th bullet of the condition which reads:

“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 H₂S 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.”

Department Determination: Refer to previous discussion regarding H₂S-CEMS above. The condition will be modified to reflect a H₂S-CFM or a TS-CFM.

- **Conditions III.B.15 and 20:** OLI asks to insert “stack” before “tests” in the requirements to notify and submit reports to the Compliance Authority.

Department Determination: The Department will modify these conditions as requested.

- **Condition III.B.17:** OLI requests removal of the words “methods for minimizing excess emissions” and “all operators and supervisors shall be properly trained to operate and ensure maintenance” from the requirement regarding the Work Practice condition. According to OLI, open flares burn LFG as open flames with a windshield to protect the flame from the wind and do not have combustion control through adjustment of the flow of air. They indicated that the “open flares will be operated according to manufacturer’s operating instructions and by trained operators who are currently operating the existing flares if a problem arises, the open flares are shutdown to avoid any excess emissions”. The condition as written suggests that **all potential managers and landfill operators, regardless of their job description, must be trained to operate and maintain the flare.**

Department Determination: The Department will modify this condition partially with the exception of removing the training requirements for **operators** of the landfill gas collection and control system. The Department believes that the training required in the condition provides the reasonable assurance for the good operation and functioning of the flares.

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- ***Condition III.B.19:*** *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” based on Rule 62-4.070 (3) F.A.C.*

Department Determination: The Department will modify this condition to include reference to Subpart AAAA and the associated startup, shutdown and maintenance (SSM) plan.

- ***Condition III.C.5:*** *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 Determination: The Department will make the suggested change to be consistent with Specific Condition 4 in Subsection III-D for the SOLAR C-40 CTG.

- ***Previous Final Determination and Permit BACT for CTG:*** *OLI does not agree with the Department’s assessment in the Final Determination (Department response to OLI comments on draft permit) that NO_x-CEMS are required by the BACT determination, if not by the requirements of 40 CFR 60, Subpart KKKK. BACT determines emission control technology, which in this case is good combustion practices. OLI believes that requiring NO_x CEMS based on BACT is, therefore, unreasonable.*

Department Analysis: BACT is defined at Rule 62-210.200(40), F.A.C., which includes the following provisions: [Link to Rule 62-210, F.A.C.](#)

(c) Each BACT determination shall include applicable test methods or shall provide for determining compliance with the standard(s) by means which achieve equivalent results.

The Department can and often does require NO_x-CEMS as part of a BACT determination or as reasonable assurance of continuous compliance with permit conditions. Further details related to this matter are provided in the responses to the following comments.

- ***Conditions III.C.3, C.9, C.12 and C.17 and III.D.3, D.9, D.12 and D.17:*** *OLI requests removal of NO_x-CEMS and NO_x-CEMS based emission standards. According to OLI the proposed CTG are not subject to §§60.4335 or 60.4345. These sections relate to CTG that (unlike those at OLI) employ water or steam injection to control NO_x emissions and are equipped with NO_x-CEMS to demonstrate compliance (instead of continuous steam or water injection monitoring).*

According to OLI, such CTG are subject to the requirements contained in §60.4340, which states “you must perform annual performance tests in accordance with §60.4400 to demonstrate continuous compliance” for NO_x. §60.4340 does not require NO_x-CEMS, which may be installed as an “alternative” to annual EPA Method 7E or Method 20 performance tests.

Department Analysis: The Department agrees with the OLI that annual performance tests are the only specific requirement to demonstrate compliance with NSPS Subpart KKKK. The Department notes that prior to issuance of the PSD permit, EPA promulgated a new 1-hour nitrogen dioxide (NO₂) ambient air quality standard (AAQS) providing even greater justification to continuously control and monitor NO_x emissions (or at least related process parameters or surrogates).

NO_x emissions from the 15 MW LFG-fueled T-130 CTG are limited to 72 parts per million by volume, dry at 7 percent oxygen (ppmvd) and the potential to emit is more than 200 tons per year (TPY). The PTE of NO_x from the single T-130 CTG is about twice the PTE of NO_x from three T-130 CTG slated for the Northwest Florida Renewable Energy Center for which the Department required NO_x-CEMS.

[Link to NWFREC](#)

NO_x emissions from each of the three 3.5 MW LFG-fueled C-40 CTG are limited to 42 ppmvd and the PTE of NO_x emissions from each is less 35 TPY.

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In addition to NO_x-CEMS, §60.4340(b)(2) also references another alternative to annual performance tests for diffusion flame as follows:

- (i) For a diffusion flame turbine without add-on selective catalytic reduction (SCR) controls, you must define parameters indicative of the unit's NO_x formation characteristics, and you must monitor these parameters continuously.

This continuous parameter monitoring system (CPMS) provision is not as robust as use of a NO_x-CEMS or establishment and monitoring of a minimum water or steam to fuel ratio to demonstrate continuous compliance. The latter is not available for the T-130 or C-40 because it does not incorporate steam or water injection.

Department Determination: The requirement for a NO_x-CEMS will be changed to CPMS for the larger SOLAR T-130 CTG. The CPMS shall be installed, calibrated, maintained and utilize defined parameters indicative of the unit's NO_x formation characteristics per § 60.4340(2)(i). Annual stack testing for the small SOLAR C-40 CTG will be used to show NO_x compliance in lieu of CEMS or CPMS. The NO_x BACT determinations for the CTG are hereby modified to allow for the NO_x compliance methods discussed above for the SOLAR T-130 and C-40 CTG.

As a result of this compliance monitoring change for the SOLAR T-130 CTG, the NO_x CEMS requirement will be removed from Specific Condition III.C.3 and replaced with a CPMS requirement. Specific Condition III.C.9 will also be modified to reflect the CPMS based requirement.

For the C-40 CTG, the NO_x CEMS requirement in Specific Condition III.D.3 will be removed. Also the 4-hour averaging time requirement will be removed from Specific Condition III.D.8 since this is a CEMS or CPMS based requirement. Finally, the requirements for a NO_x CEMS and a diluent monitor in Specific Condition III.D.15 will be removed since annual stack testing is now required.

The Department reserves its authority to require NO_x-CEMS for all CTG regardless of size in future BACT determinations or in minor permits (as reasonable assurance that the project does not trigger PSD) based on the specific circumstances of such future projects including expansions of the OLI LFGTE plant.

- ***Conditions III.C.9 and C.12:*** OLI request that the words "4-hour block average" be replaced with "4-hour rolling average". This change is necessary to be consistent with Section 60.4380(c) of Subpart KKKK.

Department Determination: The Department will modify these conditions as requested.

- ***Conditions III.C.17:*** OLI request that the words "and a diluent monitor" from the first paragraph of Condition 17 be removed. Also OLI requests that Condition 17.b (Diluent Monitor) be removed. A diluent monitor is required for oxygen corrections of continuously measured CO and NO_x emissions.

Department Determination: Per the discussion of NO_x CEMS requirements above, a NO_x CEMS is no longer required for the SOLAR T-130, the Department will modify the requested paragraph and remove the requested condition. In addition, the Department will remove Specific Condition 17.a dealing with the NO_x CEMS.

- ***Condition III.C.19:*** OLI request that a permitting note be added to the condition to clarify that even thorough the acid rain provisions of 40 CFR 75 is cited for continuous monitoring requirements for the consumption rate and heat content of allowable fuels, the CTG is not an acid rain unit.

Department Determination: The Department will add a permitting note as requested to indicate the SOLAR T-130 CTG is not an acid rain unit.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

- Condition III.D.11: OLI request that this condition be removed since the NO_x excess emission requirement is based on CEMS data.

Department Determination: Since annual NO_x stack testing is now required for compliance purposes for the C-40 CTG, this Specific Condition will be removed.

3. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the modification of Air Permit No. 0930104-014-AC (PSD-FL-382) for the LFGTE project at the OL will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit (Air Permit No. 0930104-018-AC). This determination is based on a technical review of the application, the reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in any increase in PSD-pollutant emissions. Teresa Heron is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 or by phone at 850-717-9082.

DRAFT PERMIT

PERMITTEE:

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

Air Permit Modification No. 0930104-018-AC
Modifies and Replaces Air Permit No. 0930104-014-AC
Expires: June 30, 2015
PSD-FL-382A
SIC No. 4953
Okeechobee Landfill (OL)
Landfill Gas to Energy Project

Responsible Official:
Tim Hawkins, Vice President, South Area

PROJECT AND LOCATION:

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

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

STATEMENT OF BASIS:

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

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

Executed in Tallahassee, Florida
For the Division of Air Resource Management

DRAFT

(Signature)

(Date)

(Printed Name of Above Designee)

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit Modification package (including the Final Determination and the 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 _____ to the persons listed below.

- Tim Hawkins, Waste Management of Florida, Inc.: thawkins@wm.com
- Heather Abrams, U.S. EPA Region 4: abrams.heather@epa.gov
- Kathleen Forney, U.S. EPA Region 4: forney.kathleen@epa.gov
- Dee Morse, National Park Service, Denver CO: dee_morse@nps.gov
- Lennon Anderson, DEP SED: lennon.anderson@dep.state.fl.us
- David Buff, Golder Associates, Inc.: dbuff@golder.com
- Vickie Gibson, DEP BAR Reading File: 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)

(Date)

SECTION I – GENERAL INFORMATION

FACILITY DESCRIPTION

Okeechobee Landfill, Inc. (~~OLI, 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~~ 309 acres. The total acreage for which solid waste permits have been issued comprises ~~847~~ 948 acres. Methane-rich LFG produced from the decomposition of waste materials placed in the active landfill is collected by a LFG collection system (LFGCS). The collected LFG is then flared. The facility is currently operating under Title V air permit No. 0930104-016-AV.

PROPOSED PROJECT

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

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

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

~~This LFGTE project affects the following existing~~ The existing facility is comprised of the following 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.
<u>006/CD*-04</u>	Temporary open flare with a capacity of 3,300 scfm for odor control.
<u>007/CD*-05</u>	Temporary open flare with a capacity of 3,000 scfm for odor control. Not Constructed.

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

The 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, 004 and 005 will be deactivated as a result of this project.

SECTION I – GENERAL INFORMATION

ARMS EU ID No.	New Emission Unit Description
001	Municipal solid waste landfill with LFGCS and GDP.
003	Existing enclosed flare with a capacity of 3,000 standard cubic feet per minute (scfm) and including a leachate evaporation unit. To be ultimately deactivated.
<u>004</u>	<u>Existing backup open flare with a capacity of 2,800 scfm. To be ultimately deactivated.</u>
<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/CD*-04</u>	<u>Temporary open flare with a capacity of 3,300 scfm for odor control. Deactivated.</u>
<u>007/CD*-05</u>	<u>Temporary open flare with a capacity of 3,000 scfm for odor control. Not constructed.</u>
006 008	New open flare with a total capacity of 3,000 1,500 scfm. In lieu of temporary odor control flare. Initial installation.
007 009	New open flare with a total capacity of 3,000 scfm. In lieu of temporary odor control flare. Initial installation.
<u>008 010</u>	<u>New open flare with a total capacity of 3,000 scfm. Initial installation.</u>
<u>009 011</u>	<u>New open flare with a total capacity of 3,000 scfm. Initial installation.</u>
<u>012</u>	<u>New open flare with a total capacity of 3,000 scfm. Initial installation.</u>
016 013	One 15 MW Model Solar Titan 130 (T-130) CTG. Initial installation.
017-019 014 - 016	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

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 H₂S: Protocol for Daily Sampling to Measure H₂S Concentration in LFG;
 - j. Appendix KKKK: NSPS Subpart KKKK - Requirements for Gas Turbines and Duct Burners;
 - k. Appendix SC: Standard Conditions;
 - l. Appendix WWW: NSPS Subpart WWW - for Municipal Solid Waste Landfills; and,
 - m. Appendix YYYY: NESHAP Subpart YYYY Requirements for Gas Turbines.
5. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
6. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

SECTION II ADMINISTRATIVE REQUIREMENTS

7. Installation of GDP Required: The Department finds good cause requiring the permittee to conform to new or additional conditions. Therefore, the permittee is required to install and operate by ~~December 31, 2011~~ June 30, 2012 a GDP such that all collected LFG shall be treated to a concentration less than or equal to 200 parts per million by volume (ppmv) of hydrogen sulfide (H₂S) ~~by volume (ppmv)~~ or 210 ppmv of total sulfur (TS) as determined by a H₂S-continuous ~~emission-fuel~~ monitoring system (CEM/SCFM) 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:
- 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.
 - 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.
 - 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.]

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

SECTION II ADMINISTRATIVE REQUIREMENTS

11. Unconfined Emissions of Particulate Matter: No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter. Reasonable precautions include the following: a) Paving and maintenance of roads, parking areas and yards; b) Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing; c) Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities; d) Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne; e) Landscaping or planting of vegetation; f) Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter; g) Confining abrasive blasting where possible; and, h.) Enclosure or covering of conveyor systems. In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice. [Rule 62-296.320(4)(c), F.A.C.]
12. Excess Emissions: Except as required by specific conditions of this permit dealing with excess emissions with regard to individual emission units, the following conditions apply to excess emissions at the OL.
- 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.
 - 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.
 - 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.
 - 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>Okeechobee Landfill (OL): The OL comprises two landfills sites, the Berman Road landfill and the Clay Farms landfill. Each landfill is subject to Air and Solid Waste regulations. This Air Permit regulates only air pollutant emissions from the OL. The Solid Waste permits regulate among other requirements the capacity, disposal rate and the number of cells constructed. A summary of the OL follows:</p> <ul style="list-style-type: none"> • <u>Berman Road Landfill</u>: This is an existing emission unit 208, 309 acres in size. This emission unit is expected to be closed by 2012. • <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 TPD in the Solid Waste Permit No. 0247963-001-SC. • <u>GDP Plant</u>: The OL is required to construct and operate a GDP plant to reduce H₂S concentrations in the LFG prior to its combustion. • <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.

CONSTRUCTION

1. GDP: The permittee is required to install and operate by ~~December 31, 2011~~ June 30, 2012 a GDP such that all collected LFG shall be treated to a concentration less than or equal to 200 ppmv H₂S (±2 gr S/100 SCF) or 210 ppmv of TS prior to combustion whether or not the permittee builds a LFGTE plant. [Rules 62-212.400, 62-4.070(3) and 62-4.080(1)(a), (b) and (c), F.A.C.]
2. LFGCS: By ~~December 31, 2011~~ June 30, 2012 all LFG generated at the OL shall be collected at a sufficient extraction rate, while minimizing off-site migration of subsurface gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of 3 years or more. [Rules 62-212.400 (PSD), 62-210.200 (BACT), 62-4.070 (3) and 62-296.320(2), F.A.C.]
{Permitting Note: The time requirement of 3 years based on BACT and odor control and is more 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.]
{Permitting Note: The 13,500 scfm of LFG flow is the maximum permitted flowrate, the LFGCS is capable of collecting more than 13,500 scfm of LFG, if available. The permitted flowrate of LFG is 13,500 scfm on a 30 day rolling average basis.}
4. GDP 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. 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.}

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

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

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.]

EMISSIONS LIMITATIONS

6. H₂S or TS Concentration: The H₂S or TS concentration in the LFG after it is treated by the GDP shall not exceed 200 ppmv (~~12 gr S/100 scf~~) of H₂S or 210 ppmv of TS prior to combustion. The H₂S or TS content of the landfill gas shall be monitored in accordance with specific ~~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. H₂S- Continuous Monitoring System (CEMS) or TS-CFM: The permittee shall install a H₂S- CEMS or TS-CFM to continuously monitor and record the concentration of H₂S or TS in the LFG after it is processed by the GDP and before it is combusted in the CTG or the backup flares.
- The CEMS-CFM 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 H₂S or TS in the LFG being combusted. The applicant shall notify the Compliance Authority of the CEMS-CFM location(s) 90 days before installation of the CEMS-CFM.
 - Within 30 days of initial startup of H₂S or TS CEMS-CFM (or startup of any new or replacement H₂S or TS CEMS-CFM), the performance evaluations for this H₂S or TS CEMS-CFM shall be done using Performance Specification 7 the manufacturer's specifications and procedures. EPA Methods 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations.
 - When the CFM is not available, the permittee shall implement the alternative procedures described in Appendix H₂S to demonstrate compliance with H₂S concentration limits in Condition 6 above and Subsection B, Condition 6. The permittee shall follow the sampling requirements of § 60.4360 and § 60.4370 to demonstrate compliance with the TS concentration limits Condition 6 above and Subsection B, Condition 6 when the CFM is unavailable.
 - The H₂S or TS-CFM may be used to demonstrate compliance with the SO₂ emission limits applicable to the CTG (EU 13, 14, 15 and 16) provided the CFM meets the fuel monitoring requirements for CTG given in Subsections C and D of this permit.

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

RECORDKEEPING AND REPORTING REQUIREMENTS

9. 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~~ the end of each calendar quarter: total daily and monthly gas flow rates in scfm; average daily and monthly H₂S or TS concentration in the processed (cleaned) LFG in ppmv; and any GDP malfunctions and their cause along with the corrective actions taken. [Rules 62-4.070 (3) and 62-210.200 (BACT), F.A.C.]
10. H₂S or TS LFG Concentration Exceedance: If an exceedance of the allowed H₂S concentration of 200 ppmv or the allowed TS concentration of 210 ppmv from the 'cleaned' LFG from the GDP occurs, based on a 30 day rolling average, the following information must be reported within 7 days of the exceedance to the Compliance Authority:
- The date that the exceedance occurred;

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

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

- 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-CFM system during the period of data unavailability which could affect the ability of the system to record the applicable H₂S or TS concentration limit. Operations of the CEMS system CFM and affected facility during periods of data unavailability are to be compared with operation of the CMS system-CFM and affected facility before and following the period of data unavailability; and,
- A written statement, signed by a responsible official, certifying the accuracy and completeness of the information contained in the report.

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

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

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION B. OPEN FLARES (EU 0048, 0069, 00710, 00811, and 00912)

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

EU ID No.	FLARES EMISSION UNIT DESCRIPTION
0048	1,500 scfm Open Utility Flare
0069	3,000 scfm Open Utility Flare
00710	3,000 scfm Open Utility Flare
00811	3,000 scfm Open Utility Flare
00912	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 prior to the construction of and as to backup to the CTG that will combust the LFG to generate electrical power. The continuous presence of flare pilot flames shall be monitored using thermocouples or any other equivalent device to detect the presence of a flame pursuant to 40 CFR 60.756(c)(1). [Application Nos. 0930104-014-AC and 0930104-018-AC; 40 CFR 60.756(c)(1); Rules 62-210.200(PTE), 62-212.400 and 62-4.070 (3), F.A.C.]

2. 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 in accordance with the approved flare shutdown plan. This permit does not regulate existing flares while still in operation. The existing flares are regulated by the current Title V air permit. [Rule 62-4.070 (3) F.A.C.]

4. Permitted Capacity: The maximum permitted capacities of the new flares are: 1,500 scfm of LFG for EU 0048 and 3,000 scfm of LFG for EU 0069, 00710, 00811 and 00912. [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 H₂S or TS Limits: Only treated LFG containing no more than 200 ppmv of H₂S or 210 ppmv of TS on a 30 day rolling average shall be combusted in the flares. [Rules 62-4.070(3), 62-212.400 (BACT) and 62-210.200(PTE), F.A.C.]

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION B. OPEN FLARES (EU 0048, 0069, 00710, 00811, and 00912)

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 periods not to exceed a total of 5 minutes during any 2 consecutive hours. [Rules 62-4.070 (3) and 62-212.400 (BACT), F.A.C. and 40 CFR 60.18]

TESTING AND MONITORING REQUIREMENTS

9. 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-presence~~ at each flare, shall be installed prior to the collection and combustion of the LFG. Pursuant to 40 CFR 60.756(c), The permittee shall install, calibrate, maintain, and operate according to the manufacturer’s specifications the following equipment:
- (1) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame.
 - (2) A device that records flow to or bypass of the flare. The owner or operator shall either:
 - (i) Install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes; or
 - (ii) Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.
 - (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. and 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.~~ Pursuant to 40 CFR 60.758(c)(4), for each flare, the permittee shall keep up-to-date, readily accessible continuous records of the flame or flare pilot flame monitoring specified under 40 CFR 60.756(c) and up-to-date readily accessible records of all periods of operation in which the flame or flare pilot flame is absent. [Rule 62-4.070 (3) F.A.C.; 40 CFR 60.18 and 40 CFR 60, Subpart WWW]
12. Flare Heat Content and Tip Velocity Specification: In accordance with 40 CFR 60.18(c)(3), for each open flare, the owner or operator of this facility shall select to adhere to the heat content specifications of 40 CFR 60.18(c)(3)(ii) or the maximum tip velocity specifications of 40 CFR 60.18(c)(4) or adhere to the requirements of 40 CFR 60.18(c)(3)(i). If the owner or operator decides to change the selected flare operating specification then the Compliance Authority shall be notified in writing within ten (10) calendar days of the change.

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION B. OPEN FLARES (EU 0048, 0069, 00710, 00811, and 00912)

- 13. Inspection and Maintenance of the Flares: The owner or operator shall conduct inspection and maintenance of the flares in accordance with the requirements of 40 CFR 60, Subpart WWW and 40 CFR 63, Subpart AAAA. ~~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 (e)] [40 CFR 60, Subpart WWW and 40 CFR 63, Subpart AAAA]~~
- 14. Flare Startup, Shutdown and Malfunctions Plan and Emergencies: ~~In accordance with 40 CFR 60, Subpart WWW and 40 CFR 63, Subparts A and AAAA, a startup, shutdown and malfunction (SSM) plan shall be part of this facility. 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., 40 CFR 63.6 (e)(3) and 40 CFR 63.1955(c)]~~
- 15. Stack 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. Stack 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 H₂S or sulfur-TS content of the LFG on a 30 day rolling average basis, and report the flow rate and H₂S or sulfur-TS results monthly quarterly 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~~ maintain records pursuant to the requirements of 40 CFR 63, Subparts A and AAAA and 40 CFR 60, Subpart WWW. [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.]

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION B. OPEN FLARES (EU 0048, 0069, 00710, 00811, and 00912)

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-016013)

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
01613	15 MW Solar Titan 130 (T-130) CTG

EQUIPMENT

- 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.]
- 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.]
- ~~NO_x CEMS~~: ~~In accordance with the BACT determination, and using the procedures described in §60.4335(b) and §60.4345 the permittee shall install, calibrate, operate and maintain a CEMS to continuously monitor and record NO_x 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. [Rules 62-4.070(3) and 62-212.400, F.A.C.; 40 CFR 60, Subpart KKKK]~~
- Continuous Parameter Monitoring System (CPMS): Using the procedures described in §60.4340 and §60.4355, the permittee shall establish, document, install, calibrate, maintain and operate a CPMS based upon defined parameters indicative of the CTG NO_x formation characteristics, and monitor these parameters continuously. [Rules 62-4.070(3) and 62-212.400, F.A.C.; 40 CFR 60, Subpart KKKK]

PERFORMANCE RESTRICTIONS

- Authorized Fuels: In accordance with the BACT determination, the only authorized fuel for use in the CTG is treated LFG containing no more than 200 ppmv of H₂S or 210 ppmv of TS as measured by a CFM on a 30 day rolling average basis. [Rules 62-4.070(3), 62-212.400 and 62-210.200(PTE), F.A.C.; 40 CFR 60, Subpart KKKK]
- CTG Permitted Capacity: The maximum design heat input rate of the CTG is 150 million British thermal units per hour (mmBtu/hr) on a 4 hour averaging time basis and based on the lower heating value (LHV) of the LFG. This rate is based on a compressor inlet temperature of 59 °F, International Organization for Standardization (ISO) conditions of the LFG. The heat input rate will vary depending upon CTG characteristics, ambient conditions, alternate methods of operation and evaporative cooling (if installed). The permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department. [Application No. 0930104-014-AC; and Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]
- 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

- 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

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION C. SOLAR T-130 CTG (EU-016013)

for Stationary Combustion Turbines (see Appendix KKKK)].

NESHAP APPLICABILITY

8. NESHAP Subpart YYYY Applicability: This facility is a major source of HAP. This CTG is potentially subject to 40 CFR 63, Subpart YYYY - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines. The applicability of this rule has been stayed for lean premix and diffusion flame gas-fired combustion turbines such as planned for this project. For the applicable requirements of NESHAP, Subpart YYYY to this 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 KKKK of this permit. Emissions from this CTG shall not exceed the following standards.

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

- 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_x mass emission rates are defined as oxides of nitrogen expressed as nitrogen dioxide (NO₂). Continuous compliance with the 4-hour rolling average NO_x standards shall be demonstrated based on data collected by the required CPMS 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 H₂S or TS specification effectively limits the potential emissions of SAM and SO₂ from the CTG. Compliance with the LFG H₂S specification of 200 ppmv or 210 ppmv of TS shall be determined by H₂S CEMS a CFM. Such representative LFG CEMS CFM data will insure that the SO₂ emissions sulfur content of the LFG (a type of biogas) does not exceed the 0.15 lb SO₂/mmBtu heat input limitation of 40 CFR 60, Subpart KKKK provided the permittee follows the procedures given in 40 CFR 60.4415(a)(1)(ii).
- f. The mass emission rate standards are based on a turbine inlet condition of 59 °F. Mass emission rate may be adjusted to actual test conditions in accordance with the performance curves and/or equations on file with the Department.

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION C. SOLAR T-130 CTG (EU-016013)

- g. ~~CEMS CPMS-based monitoring~~ compliance shall be conducted in accordance with the 40 CFR 60, NSPS, Subpart KKKK for NO_x.

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

EXCESS EMISSIONS

10. Definitions Related to Excess Emissions: Rule 62-210.200 (Definitions), F.A.C. defines the following terms.
- 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.
 - Shutdown* is the cessation of the operation of an emissions unit for any purpose.
 - 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 CPMCEMS 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.
- NO_x Emissions*: Excess NO_x emissions based on a 4 hour rolling 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_x, PM/PM₁₀ and opacity. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. The CTG shall demonstrate compliance with the NO_x standard in accordance with the methods specified in NSPS Subpart KKKK of 40 CFR 60. Compliance tests shall be performed in accordance with reference methods as described in 40 CFR 60, Appendix A and 40 CFR 51 Appendix M, adopted by reference in Chapter 62-204.800, F.A.C. [Rules 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]
14. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), the CTG shall be tested to demonstrate compliance with the emissions standards for CO and opacity. The CTG shall demonstrate compliance with the NO_x standard in accordance with the methods specified in NSPS Subpart KKKK of 40 CFR 60. [Rule 62-297.310(7)(a)4, F.A.C.]
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.]

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION C. SOLAR T-130 CTG (EU-046013)

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 _x Emissions from Stationary Sources.
9	Visual Determination of the Opacity of Emissions from Stationary Sources.
10	Determination of CO Emissions from Stationary Sources. The method shall be based on a continuous sampling train.
19	Determination of SO ₂ Removal Efficiency and PM, SO ₂ and NO _x Emission Rates. Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 and 62-297.100, F.A.C. and Appendix A of 40 CFR 60]

CONTINUOUS MONITORING REQUIREMENTS

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

a. NO_x Monitor: The NO_x 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_x monitor shall be performed using EPA Method 20 or 7E in Appendix A of 40 CFR 60.

b. Diluent Monitor: The oxygen (O₂) or carbon dioxide (CO₂) content of the flue gas shall be monitored at the location where CO and NO_x are monitored to correct the measured emissions rates to 15% oxygen. If a CO₂ 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]

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

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION C. SOLAR T-130 CTG (EU-016013)

monitoring, as part of the Acid Rain Program; this emission unit is not an acid rain unit. The provisions from Appendix D of 40 CFR 75 dealing with the LFG heat content and consumption rate are included for monitoring purposes only.

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-017014, 018015 AND 019016)

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
01714	3.5 MW Solar Centaur 40 (C-40) CTG
01815	3.5 MW Solar Centaur 40 (C-40) CTG
01916	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_x CEMS or Continuous Parameter Monitoring System (CPMS): ~~In accordance with the BACT determination, and using the procedures described in §60.4335(b) and §60.4345, the permittee shall install, calibrate, operate and maintain a CEMS to continuously monitor and record NO_x 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. As an alternative to a NO_x CEMS and using the procedures described in §60.4340 and §60.4355, the permittee shall establish, document, install, calibrate, maintain and operate a CPMS based upon defined parameters indicative of the CTG NO_x formation characteristics, and monitor these parameters continuously.~~ [Rules 62-4.070(3) and 62-212.400, F.A.C.; 40 CFR 60, Subpart KKKK]

PERFORMANCE RESTRICTIONS

3. Authorized Fuels: ~~In accordance with the BACT determination,~~ The only authorized fuel for use in the CTG is treated LFG containing no more than 200 ppmv of H₂S or 210 ppmv of TS as measured by a CFM on a 30 day rolling average basis. [Rules 62-4.070(3), 62-212.400 and 62-210.200(PTE), F.A.C.; 40 CFR 60, Subpart KKKK]
4. CTG Permitted Capacity: The design heat input rate of each CTG is 45 mmBtu/hr (4 hour averaging time basis) based on lower heating value (LHV) of the LFG. This rate is based on a compressor inlet temperature of 59 °F, International Organization for Standardization (ISO) conditions. The heat input rate will vary depending upon combustion turbine characteristics, ambient conditions, alternate methods of operation and evaporative cooling. The permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department.
5. 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

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

SECTION IV – EMISSION UNIT(S) SPECIFIC CONDITIONS
SUBSECTION D. SOLAR T-40 CTG (EU-017014, 018015 AND 019016)

for Stationary Combustion Turbines (see Appendix KKKK)]

NESHAP APPLICABILITY

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

EMISSION LIMITS

8. Emission Standards: The following standards are at least as stringent as the Subpart KKKK limits described in **Condition 6** 7-above and in Appendix KKKK of this permit. Emissions from each of these CTG shall not exceed the following standards.

Pollutant	Method of Operation	CEMS-Based Averages (Initial/Annual Stack Test 3-Run Average) ^a	
		ppmv ^b	lb/hr ^c
CO	LFG	250	28.6
NO _x ^d	LFG	42 4-hour rolling average	7.9 4-hour rolling average
PM/PM ₁₀ ^e	LFG	N/A	2.8
		200 ppmv H ₂ S or 210 ppmv TS in LFG on a 30-day basis (BACT)	
		Visible emissions shall not exceed 10% opacity for each 6-minute block average.	
SAM/SO ₂ ^f	LFG	200 ppmv H ₂ S or 210 ppmv TS in LFG on a 30-day basis (BACT)	
		0.15 lb SO ₂ /mmBtu (40 CFR 60, Subpart KKKK)	

- a. All tests conducted at 100 percent (%) load.
- b. Parts per million by volume dry/corrected to 15% oxygen
- c. The mass emission rate standards are based on a turbine inlet condition of 59 °F. Mass emission rate may be adjusted to actual test conditions in accordance with the performance curves and/or equations on file with the Department.
- d. The initial and annual EPA Method 7E or Method 20 tests shall be used to 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_x mass emission rates are defined as oxides of nitrogen expressed as nitrogen dioxide (NO₂). Continuous compliance with the 4 hour average NO_x standards shall be demonstrated based on data collected by the required CEMS.
- e. After the initial compliance test the sulfur fuel specification combined with the efficient combustion design and operation of each CTG shall indicate compliance. Compliance with the fuel specifications and visible emissions standards shall serve as indicators of good combustion. Compliance with the fuel specifications shall be demonstrated by keeping records of the fuel sulfur content. Compliance with the visible emissions standard shall be demonstrated by conducting tests in accordance with EPA Method 9.
- f. The LFG H₂S or TS specification effectively limits the potential emissions of SAM and SO₂ from the CTG. Compliance with the LFG H₂S specification of 200 ppmv or 210 ppmv of TS shall be determined by H₂S-CEMS a CFM. Such representative LFG CEMSCFM data will insure that the SO₂ emissions sulfur content of the LFG (a type of biogas) does not exceed the 0.15 lb SO₂/mmBtu heat input limitation of 40 CFR 60, Subpart KKKK provided the permittee follows the procedures given in 40 CFR 60.4415(a)(1)(ii).
- g. CEMS or CPMS based monitoring compliance shall be conducted in accordance with the 40 CFR 60, NSPS, Subpart KKKK for NO_x.

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

SECTION IV – EMISSION UNIT(S) SPECIFIC CONDITIONS
SUBSECTION D. SOLAR T-40 CTG (EU-017014, 018015 AND 019016)

EXCESS EMISSIONS

9. 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.
10. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CEMS data. [Rule 62-210.700(4), F.A.C.]
11. Excess Emissions Calculations: ~~The following conditions apply only to the State Implementation Plan (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_x Emissions:* Excess NO_x emissions based on the 4-hour block average standard shall be calculated in accordance with the NSPS Subpart KKKK provisions.~~

TEST METHODS AND PROCEDURES

11. Initial Compliance Tests: Each CTG shall be tested to demonstrate initial compliance with the emissions standards for CO, NO_x, PM/PM₁₀ and opacity. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. Each CTG shall demonstrate compliance with the NO_x standard in accordance with the methods specified in NSPS Subpart KKKK of 40 CFR 60. Compliance tests shall be performed in accordance with reference methods as described in 40 CFR 60, Appendix A and 40 CFR 51 Appendix M, adopted by reference in Chapter 62-204.800, F.A.C. [Rules 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]
12. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), each CTG shall be tested to demonstrate compliance with the emissions standards for NO_x, CO and opacity. Each CTG shall demonstrate compliance with the NO_x standard in accordance with the methods specified in NSPS Subpart KKKK of 40 CFR 60. [Rule 62-297.310(7)(a)4, F.A.C.]
13. 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.]
14. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content.
7E	Determination of NO _x Emissions from Stationary Sources.
9	Visual Determination of the Opacity of Emissions from Stationary Sources.
10	Determination of CO Emissions from Stationary Sources. The method shall be based on a continuous sampling train.

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

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 and 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

CONTINUOUS MONITORING REQUIREMENTS

~~15. CEMS: The permittee shall install, calibrate, maintain and operate a CPMS or CEMS and a diluent monitor to measure and record the emissions of NO_x from each CTG in a manner sufficient to demonstrate continuous compliance with the CEMS NO_x 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_x standard (and subject to the specified averaging period), the permittee shall notify the Compliance Authority (see Appendix CEMS of this permit).~~

~~a. NO_x CEMS Alternative:~~

- ~~• NO_x Monitor: The NO_x 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_x monitor shall be performed using EPA Method 20 or 7E in Appendix A of 40 CFR 60.~~
- ~~• Diluent Monitor: The oxygen (O₂) or carbon dioxide (CO₂) content of the flue gas shall be monitored at the location where CO and NO_x are monitored to correct the measured emissions rates to 15% oxygen. If a CO₂ 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

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

RECORDS AND REPORTS

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

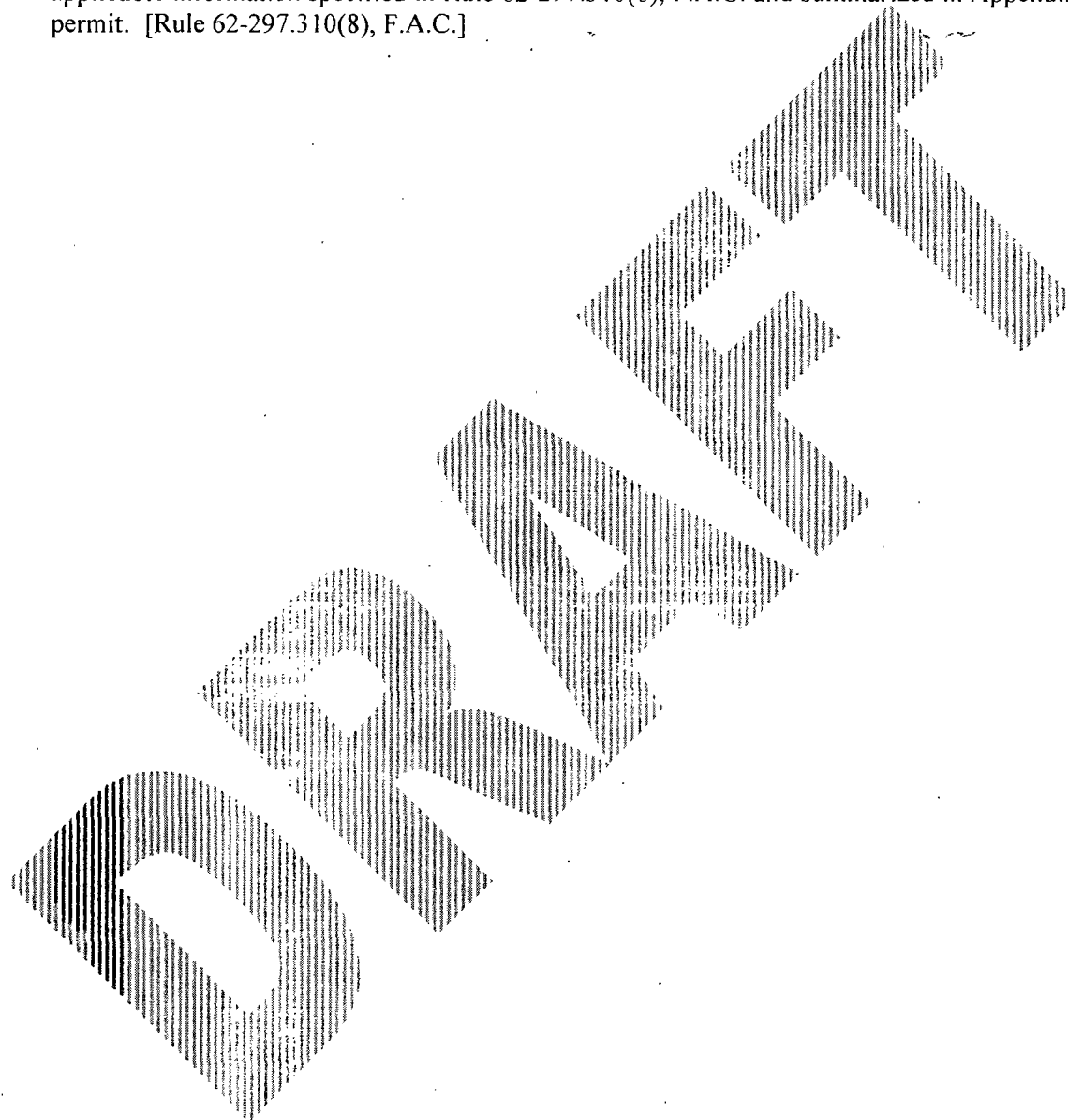
[Rule 62-4.070(3), F.A.C. and 40 CFR 75]

{Permitting Note: While 40 CFR 75 deals with continuous emissions monitoring, including fuel monitoring, as part of the Acid Rain Program; this emission unit is not an acid rain unit. The provisions from Appendix D of 40 CFR 75 dealing with the LFG heat content and consumption rate are included for monitoring purposes only.}

17. Stack Test Reports: The owner or operator of an emissions unit for which a compliance test is required

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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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Appendix A:	NSPS, Subpart A and NESHAP, Subpart A - Identification of General Provisions.
Appendix AAAA:	NESHAP, Subpart AAAA for Municipal Solid Waste Landfills.
Appendix CC:	Common Conditions.
Appendix CCD:	Common Control Devices – Flares.
Appendix CF:	Citation Formats and Glossary of Common Terms.
Appendix CTR:	Common Testing Requirements.
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Appendix H ₂ S:	Protocol for Daily Sampling to Measure H ₂ S Concentration in LFG.
Appendix KKKK:	NSPS, Subpart KKKK Requirements for Gas Turbines and Duct Burners.
Appendix SC:	Standard Conditions.
Appendix WWW:	NSPS, Subpart WWW for Municipal Solid Waste Landfills.
Appendix YYYYY:	NESHAP, Subpart YYYYY Requirements for Gas Turbines.

SECTION IV. APPENDIX A

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

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

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

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

NESHAP - SUBPART A, IDENTIFICATION OF GENERAL PROVISIONS

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

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

SECTION IV. APPENDIX A

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

§ 63.7 Performance Testing Requirements.

§ 63.8 Monitoring Requirements.

§ 63.9 Notification Requirements.

§ 63.10 Recordkeeping and Reporting Requirements.

§ 63.11 Control Device Requirements.

§ 63.12 State Authority and Delegations.

§ 63.13 Addresses of State Air Pollution Control Agencies and EPA Regional Offices.

§ 63.14 Incorporation by Reference.

§ 63.15 Availability of Information and Confidentiality.

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

SECTION IV. APPENDIX AAAA

NESHAP, SUBPART AAAA FOR MUNICIPAL SOLID WASTE LANDFILLS

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

[NESHAP, Subpart AAAA](#)



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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

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COMMON CONDITIONS

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

(4) Emission Factors.

- a. An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.
- 1) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests

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conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.

- 2) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
 - 3) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
- b. If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.
- (5) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
 - (6) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.
 - (7) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.
 - (8) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

c. Annual Operating Report for Air Pollutant Emitting Facility

- (1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:
 - (a) All Title V sources.
 - (b) All synthetic non-Title V sources.
 - (c) All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.
 - (d) All facilities for which an annual operating report is required by rule or permit.
- (2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.

SECTION IV. APPENDIX CC

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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

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:

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COMMON CONTROL DEVICES - FLARES

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

K = Constant as defined as:

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

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 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

acfm: actual cubic feet per minute

ARMS: Air Resource Management System
(Department's database)

BACT: best available control technology

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

SECTION IV. APPENDIX CF

CITATION FORMATS AND GLOSSARY OF COMMON TERMS

CFR: Code of Federal Regulations	O₂: oxygen
CO: carbon monoxide	Pb: lead
COMS: continuous opacity monitoring system	PM: particulate matter
DEP: Department of Environmental Protection	PM₁₀: particulate matter with a mean aerodynamic diameter of 10 microns or less
Department: Department of Environmental Protection	PSD: prevention of significant deterioration
dscfm: dry standard cubic feet per minute	psi: pounds per square inch
EPA: Environmental Protection Agency	PTE: potential to emit
ESP: electrostatic precipitator (control system for reducing particulate matter)	RACT: reasonably available control technology
EU: emissions unit	RATA: relative accuracy test audit
F.A.C.: Florida Administrative Code	SAM: sulfuric acid mist
F.D.: forced draft	scf: standard cubic feet
F.S.: Florida Statutes	scfm: standard cubic feet per minute
FGR: flue gas recirculation	SIC: standard industrial classification code
F: fluoride	SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)
ft²: square feet	SO₂: sulfur dioxide
ft³: cubic feet	TPH: tons per hour
gpm: gallons per minute	TPY: tons per year
gr: grains	UTM: Universal Transverse Mercator coordinate system
HAP: hazardous air pollutant	VE: visible emissions
Hg: mercury	VOC: volatile organic compounds
I.D.: induced draft	
ID: identification	
kPa: kilopascals	
lb: pound	
MACT: maximum achievable technology	
MMBtu: million British thermal units	
MSDS: material safety data sheets	
MW: megawatt	
NESHAP: National Emissions Standards for Hazardous Air Pollutants	
NO_x: nitrogen oxides	
NSPS: New Source Performance Standards	
O&M: operation and maintenance	

SECTION IV. APPENDIX CTR
COMMON TESTING REQUIREMENTS

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

Compliance Testing Requirements

1. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]
2. Applicable Test Procedures - Opacity Compliance Tests: When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

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

3. Determination of Process Variables

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

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

4. 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

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.]

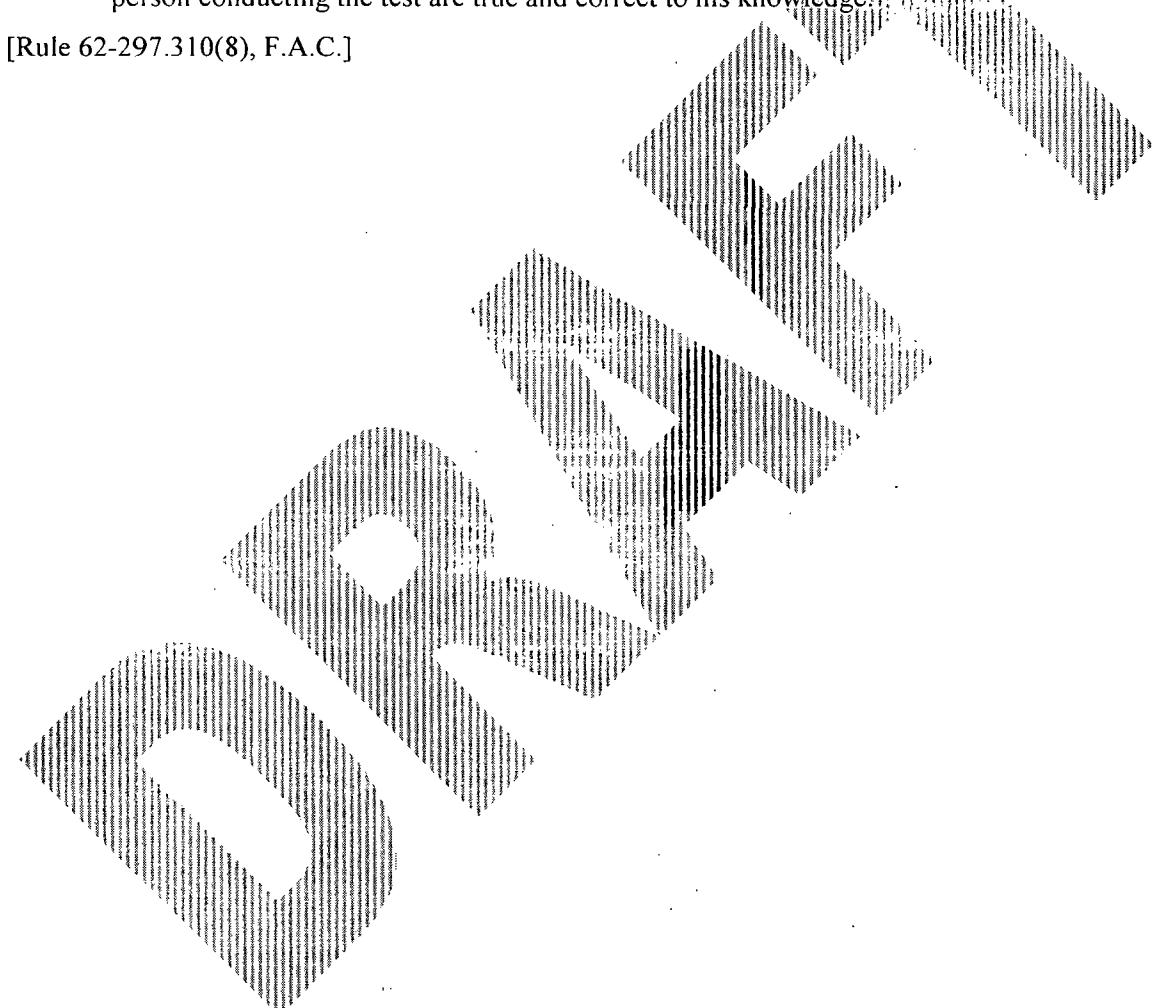
Records and Reports

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

- 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 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 H₂S

PROTOCOL FOR DAILY SAMPLING TO MEASURE H₂S CONCENTRATION IN LFG

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

Sampling Equipment

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

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

Equipment Requirements

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

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

Calibration Procedure

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

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

SECTION IV. APPENDIX H₂S

PROTOCOL FOR DAILY SAMPLING TO MEASURE H₂S CONCENTRATION IN LFG

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

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

Monitoring Requirements

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

Sampling Procedure

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

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

SECTION IV. APPENDIX H₂S

PROTOCOL FOR DAILY SAMPLING TO MEASURE H₂S CONCENTRATION IN LFG

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

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

Hydrogen Sulfide Daily Monitoring Form

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

SECTION IV. APPENDIX H₂S

PROTOCOL FOR DAILY SAMPLING TO MEASURE H₂S CONCENTRATION IN LFG

HYDROGEN SULFIDE DAILY MONITORING FORM

BERMAN ROAD LANDFILL - OKEECHOBEE, FLORIDA

Date: _____ Time: _____

Sampler Name(s): _____

Weather Conditions

General Conditions: _____

Wind Direction: _____ Wind Speed: _____

Temperature (°F): _____ Pressure: _____

H₂S Sampling:

Sample 1 Concentration (ppmv): _____

Sample 2 Concentration (ppmv): _____

Average H₂S Concentration (ppmv): _____

Notes: _____

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_x limits from Subpart KKKK that apply to the OL LFGCP simple cycle CTG.

Table 1. NO_x Emission Limits for New Stationary Combustion Turbines Subpart KKKK of Part 60.

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

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

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

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.

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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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- 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

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

[NSPS, Subpart WWW](#)



SECTION IV. APPENDIX YYYY

NESHAP SUBPART YYYY REQUIREMENTS FOR GAS TURBINES

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

Staying of the Rule

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

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

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

Requirements

The applicable requirements in Subpart YYYY are:

§ 63.6145 What notifications must I submit and when?

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

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

Walker, Elizabeth (AIR)

From: Walker, Elizabeth (AIR)
Sent: Monday, June 20, 2011 2:46 PM
To: thawkins@wm.com
Cc: Anderson, Lennon; Gibson, Victoria; Koerner, Jeff; Heron, Teresa; Read, David; Linero, Alvaro; abrams.heather@epa.gov; Forney.Kathleen@epamail.epa.gov; dee_morse@nps.gov; dbuff@golder.com
Subject: Revised Intent to Issue - BERMAN ROAD LANDFILL; 0930104-018-AC/PSD-382A
Attachments: Revised_Intent_0930104-018-AC.pdf

Dear Sir/ Madam:

Attached is the official **Revised Notice of Intent to Issue** 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 permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0930104.018.AC.R_pdf.zip

Owner/Company Name: OKEECHOBEE LANDFILL, INC.
Facility Name: BERMAN ROAD LANDFILL
Project Number: 0930104-018-AC
Permit Status: REVISED DRAFT
Permit Activity: CONSTRUCTION/LFG TO ENERGY PROJECT MODIFICATION
Facility County: OKEECHOBEE

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>.

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

Elizabeth Walker

Bureau of Air Regulation
Division of Air Resource Management (DARM)
(850)717-9093

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 Herschel T. Vinyard Jr. is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

Walker, Elizabeth (AIR)

From: Buff, Dave [DBuff@GOLDER.com]
To: Walker, Elizabeth (AIR)
Sent: Monday, June 20, 2011 2:48 PM
Subject: Read: Revised Intent to Issue - BERMAN ROAD LANDFILL; 0930104-018-AC/PSD-382A

Your message was read on Monday, June 20, 2011 2:47:37 PM (GMT-05:00) Eastern Time (US & Canada).