## Florida Department of Environmental Protection

### Memorandum

TO:

Trina Vielhauer, Bureau of Air Regulation

THROUGH:

Jon Holtom, P.E., Title V Section

FROM:

Scott M. Sheplak, P.E., Title V Section

DATE:

October 20, 2008

SUBJECT:

Proposed Permit No. 0990234-013-AV

Solid Waste Authority of Palm Beach County, North County Resource Recovery Facility

Title V Air Operation Permit Revision

Attached for your review are the following items:

• Proposed Permit Determination;

- Statement of Basis; and
- Proposed Title V Permit.

The subject of this permitting action is the revision of Title V air operation permit No. 0990234-010-AV for the existing North County Resource Recovery Facility, which is located in Palm Beach County, Florida. The permit revision is for inclusion of the AC project, Permit No. 0990234-012-AC.

Comments were received in response to the Draft permit and have been addressed in the Proposed Permit Determination. Changes have been made to the Draft permit in response to these comments. The changes were not deemed significant enough to require a revised Draft permit and new Public Notice. I recommend your approval of the attached Proposed Permit.

JKH/sms

Attachments



# Florida Department of Environmental Protection

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

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

October 24, 2008

Sent by Electronic Mail - Return Receipt Requested

Mr. Mark Hammond
Executive Director
Solid Waste Authority of Palm Beach County
7501 North Jog Road
West Palm Beach, Florida 33412

Re:

Title V Air Operation Permit Revision Proposed Permit No. 0990234-013-AV North County Resource Recovery Facility

Dear Mr. Hammond:

One copy of the Proposed Permit Determination for the revision of the Title V Air Operation Permit for the North County Resource Recovery Facility located at 7501 North Jog Road, West Palm Beach, Palm Beach County, is enclosed. This letter is only a courtesy to inform you that the Draft permit has become a Proposed permit.

An electronic version of this determination has been posted on the Division of Air Resource Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is:

"http://www.dep.state.fl.us/air/eproducts/apds/default.asp"

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the Proposed permit is made by the USEPA within 45 days, the Proposed permit will become a Final permit no later than 55 days after the date on which the Proposed permit was mailed (posted) to USEPA. If USEPA has an objection to the Proposed permit, the Final permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

To simplify review and distribution, only the changes made to the Title V air operation permit as a result of this revision are provided.

If you have any questions, please contact Mr. Scott M. Sheplak, P.E., by telephone at 850/921-9532 or by email at Scott.Sheplak@dep.state.fl.us.

Sincerely,

Ťrina L. Vielhauer

Chief

Bureau of Air Regulation

TV/jkh/sms

Enclosure

Copies sent by electronic mail (return receipt requested) to the following:

Mr. Mark Hammond, SWA: mhammond@swa.org

Mr. Manuel Hernandez, P.E., CDM: hernandezmj@cdm.com

Mr. Joe Lurix, DEP Southeast District Office: Joe.Lurix@dep.state.fl.us

Mr. James Stormer, PBCHD: <u>James Stormer@doh.state.fl.us</u>

Mr. Mike Halpin, P.E., DEP Siting Coordination Office: Mike.Halpin@dep.state.fl.us

Ms. Katy R. Forney, U.S. EPA, Region 4: Forney, Kathleen@epamail.epa.gov

Ms. Barbara Friday, DEP BAR: Barbara Friday@dep.state.fl.us (for posting with U.S. EPA, Region 4)

Ms. Victoria Gibson, DEP BAR: victoria.gibson@dep.state.fl.us (for reading file)

### PROPOSED PERMIT DETERMINATION

### Proposed Permit No. 0990234-013-AV

### I. Public Notice.

A Written Notice of Intent To Issue A Title V Air Operation Permit to Solid Waste Authority of Palm Beach County for the North County Resource Recovery Facility located at 6501 North Jog Road, West Palm Beach, Palm Beach County, was clerked on September 3, 2008. The Public Notice Of Intent To Issue A Title V Air Operation Permit was published in the Palm Beach Post on September 8, 2008. The draft Title V air operation permit was available for public inspection at the permitting authority's office in Tallahassee. Proof of publication of the Public Notice Of Intent To Issue A Title V Air Operation Permit was received on September 10, 2008.

### II. Public Comment(s).

No comments were received from the public during the 30 day public comment period, however, comments were received from the Applicant. The comments were not considered significant enough to reissue the draft Title V air operation permit and require another Public Notice, therefore, the draft Title V air operation permit was changed. Those comments are addressed below. Additions to the Draft permit are indicated by a <u>double underline</u> within the permit itself. Deletions from the Draft permit are indicated by a <u>strike through</u> within the permit itself.

### **Applicant**

On October 1, 2008, the Department received comments dated September 22, 2008 from the applicant. The following summarizes the comments and the Department's response.

### **General Comment through All Documents**

1. The existing 1,800-scfm flare (New EU #020) at the Class III Landfill will only be used as a back-up at the Class III Landfill. Suggest addition of "at the Class III Landfill" after all references made to this flare being used as a back-up.

**Response:** The change is made. In the Proposed permit, the brief description for E.U. ID No. -020 is updated throughout.

### **Draft Title V Air Operation Permit - Statement of Basis**

2. The Statement of Basis states that "The facility is decommissioning the existing emergency generators listed in Appendix I-1. These units are therefore removed from this Appendix." The SWA does not intend to decommission the emergency diesel generator for the Resource Recovery Facility (RRF) nor the emergency diesel generator for the Utilities Facility.

The original application submitted to FDEP on March 25, 2008, included the addition of two new generators at the NCRRF. The first new generator was to be installed in the new landfill scalehouse, and the second new generator was to be installed in the new landfill operations and maintenance building. The two generators that would have been decommissioned were the ones at the existing landfill scalehouse not the ones at the RRF and nor the one at the Utilities Facility. Since the submittal of the application in March, SWA has decided to cancel the construction of the new landfill scalehouse and continue the operation of the existing landfill scalehouse; therefore, the only new generator requested under this application is the generator for the new landfill operations and maintenance building. The

emergency generators at the existing landfill scalehouse will not be decommissioned. We request that the emergency diesel generators for the RRF and the Utilities Facility be kept in Appendix I-1 in the new permit.

**Response:** The requested changes are made. The existing emergency generators are kept in the Appendix I-1.

### **Draft Title V Air Operation Permit – Specific Conditions**

3. Specific Condition B.O.c. on page 5 shows the gas flow rate limits of the flares on a million ft<sup>3</sup>/yr basis. All previous permits have established the flow rate limits on a scfm basis. SWA and CDM request that the flow rate limits for the new air construction and Title V permit remain on a scfm basis. SWA would also like to keep the current permit's Specific Condition B.47 Landfill Gas Flow Rate in the new Title V Permit, as it includes specific requirements for determining the actual gas flow rates.

**Response:** The flow rate for each flare is kept at the limited scfm basis as stated in specific condition numbers III.3. and III.4. The annual flow rates were calculated at 8,760 hours of operation per year for each flare. The ft<sup>3</sup>/yr values are moved under the emissions unit description.

4. Specific Condition B.O.c. also states that "Total landfill gas flow to the flares shall be continuously measured and recorded." SWA and CDM would like to clarify that, since the existing Class III flare (New EU #020) will only be used as a back-up flare, the landfill flow rates to this flare will only be continuously monitored if it is put into service due to a major malfunction of the main Class III flare (the relocated and de-rated flare (EU #004)).

**Response:** When the back up flare is placed into service the total flow to this one shall be monitored and recorded. Flares typically are equipped with such monitoring and recordation. No change is made.

5. Specific Condition B.0.e. on page 5 requires that ASTM method D-3246-81 be used to determine the sulfur content of the gas. We cannot find this ASTM method on the ASTM database. The current permit requires that sulfur content of the gas be determined using ASTM method D1072-90 or later method. ASTM method D5504 is the most recent method used to determine sulfur content; therefore, we would suggest keeping the current permit's wording or using ASTM method D5504.

**Response:** The permitting authority is unable to confirm the ASTM method D5504; however, specific condition **B.49.** in Permit No. 0990234-010-AV does state ASTM Method D1072-90, or later method. The test method is changed to "ASTM Method D1072-90, or later method."

6. Specific Condition B.0.e. on page 5 also requires that SO<sub>2</sub> calculations in tons per year (TPY) be included in the annual operating report (AOR). The SO<sub>2</sub> calculations are not part of the current AOR, and we would request that this requirement be removed from the new permit.

**Response:** Specific condition **B.49.** of Permit No. 0990234-010-AV requires the actual sulfur content to be reported to the Department as an attachment to the facility's AOR. Calculating and reporting  $SO_2$  is required for reasonable assurance purposes. The claim was made that this project does not trigger PSD applicability. Modifications of the landfills, e.g., expansions, could eventually trigger PSD. Calculating  $SO_2$  from the reported sulfur content value(s) should not create much of an extra burden. The Department is requiring landfill gas to be analyzed for sulfur content and  $SO_2$  to be calculated and reported with the AOR consistent with other recent landfill permits. No change is made.

### III. Other.

In specific condition C.2., the Department further clarified the applicability of the NSPS & RICE MACT requirements for the engine. As a result, an Appendix 40 CFR 63 Subpart ZZZZ is added to the permit.

### IV. Conclusion.

The enclosed Proposed Title V Air Operation Permit includes the aforementioned changes to the Draft Title V Air Operation Permit.

The permitting authority will issue the Proposed Permit Number 0990234-013-AV, with the changes noted above.

### STATEMENT OF BASIS

Solid Waste Authority of Palm Beach North County Regional Resource Recovery Facility

Title V Air Operation Permit Revision, Proposed Permit No. 0990234-013-AV
Air Construction Permit No. 0990234-012-AC

These permits (project) authorize the following activities at the facility:

- Replacement of the existing Class I, 3500 standard cubic feet per minute (scfm) flare with a new similar 3,500 scfm flare;
- Replacement of the existing Class III landfill gas flare with the existing Class I landfill gas flare, which will be de-rated to 1800 scfm to match the permitted capacity;
- Retention of the existing Class III 1800 scfm landfill gas flare for back up use; and,
- Addition of one emergency generator, an engine, at the new operations building.

This existing facility is located at 6501 North Jog Road, West Palm Beach, Palm Beach County; UTM Coordinates: Zone 17, 585.82 km East and 2960.474 km North; Latitude: 26° 45' 53" North and Longitude: 80° 08' 12" West.

This Title V air operation permit revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. The above named permittee is hereby authorized to operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Below is a brief overview of the changes made in this permit revision compared to the most recently issued/posted Title V permit on the web site, FINAL Permit No. 0990234-010-AV.

- The facility requested a concurrent air construction (AC) permit/Title permit revision for this project. The AC permit, Permit No. 0990234-012-AC, is incorporated into the Title V air operation permit in Subsection III.B. along with a Compliance Plan, attached as Appendix CP-1.
- This facility is a major source of hazardous air pollutants (HAP). The RICE MACT Subpart ZZZZ applies to the new proposed engine since it is an emergency generator, a stationary RICE with a rating of less than 500 brake HP, and a compression ignition (CI). The engine uses low sulfur diesel fuel and is added in Subsection III.C. of the permit as a regulated emissions unit.
- The facility is decommissioning the existing emergency generators listed in the Appendix I-1. These units are therefore removed from this Appendix.

The following Department initiated changes are made in this permitting action:

As a result of a recent rule change to Rule 62-213.420(1)(a)2., F.A.C., the Renewal Application Due Date for Permit No. 0990234-010-AV as shown on the placard page of the permit is changed <u>from</u>: January 3, 2011 <u>to</u>: November 19, 2010. {The rule change requires the renewal application to be submitted 225 days prior to expiration instead of the previous 180 days.}

### Solid Waste Authority of Palm Beach County North County Regional Resource Recovery Facility Facility ID No. 0990234 Palm Beach County

Title V Air Operation Permit Revision (1<sup>st</sup> revision to Permit No. 0990234-010-AV)

Proposed Permit No. 0990234-013-AV

### Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Title V Section
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114

Fax: 850/922-6979

### **Compliance Authority:**

Southeast District Office 400 North Congress Avenue West Palm Beach, FL 33401 Telephone: 561/681-6600

Fax: 561/681-6755

## Title V Air Operation Permit Revision Proposed Permit No. 0990234-013-AV

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  - B. Emission Unit -003, Class I Landfill (1,800 scfm Flare Removed)
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    Emission Unit -020, Class III Landfill Existing Flare-1,800 (*Backup use only* at the Class III Landfill)
  - C. Emission Unit -021, New engine (emergency generator)



# Florida Department of Environmental Protection

Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

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

### Permittee:

Solid Waste Authority of Palm Beach County North County Resource Recovery Facility West Palm Beach, Florida 33412 Proposed Permit No. 0990234-013-AV Facility ID No. 0990234 SIC Nos. 49, 4953

Project: Title V Air Operation Permit Revision
& Air Construction Permit

This project is for a permit to revise Title V air operation permit, Permit No. 0990234-010-AV, concurrently with an air construction (AC) permit, Permit No. 0990234-012-AC. The AC permit is primarily for changes being made to the flares at the landfills, specifically: (1) the replacement of an existing flare; (2) the de-ration & relocation of an existing flare; and, (3) the conversion of one of the existing flares to back up use only. The AC permit also reflects the installation of a new emergency generator at the new operations building. The proposed emergency generator is an engine which has been "Environmental Protection Agency (EPA) Tier 3 certified" according to Caterpillar<sup>®</sup>, the manufacturer.

This existing facility, the Solid Waste Authority of Palm Beach County, North County Regional Resource Recovery Facility, is located at 6501 North Jog Road, West Palm Beach, Palm Beach County; UTM Coordinates: Zone 17, 585.82 km East and 2960.474 km North; Latitude: 26° 45' 53" North and Longitude: 80° 08' 12" West.

This Title V air operation permit revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. The above named permittee is hereby authorized to operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

### Referenced attachments made a part of this permitting action:

Appendix U-1, List of Unregulated Emissions Units and/or Activities Appendix I-1, List of Insignificant Emissions Units and/or Activities

Appendix 40 CFR 63, Subpart ZZZZ

Appendix 40 CFR 60 Subpart IIII Appendix CP-1, Compliance Plan

0990234-010-AV Effective Date: July 2, 2006 **Revision Effective Date:** ARMS Day 55

Renewal Application Due Date: November 19, 2010

Expiration Date: July 2, 2011

Joseph Kahn, Director Division of Air Resource Management

JK/tlv/jkh/sms

Solid Waste Authority of Palm Beach County North County Regional Resource Recovery Facility

### Section I. Facility Information.

### Subsection A. Facility Description.

This facility consists of a *large* municipal waste combustor plant designed to process 2,000 tons per day (TPD) of municipal solid waste (MSW). The facility burns processed MSW that is called "refuse derived fuel" (RDF). The RDF plant is equipped with three MSW processing lines, any two of which can handle the 2,000 TPD of incoming MSW. The boiler plant includes two B&W boilers, each designed to operate up to a maximum heat input of 412.5 MMBtu/hr with a steam flow rating of 324,000 lbs./hr. At a reference heating value of 5,500 Btu/lb., this is equivalent to 900 TPD of RDF per boiler. Emissions from each boiler are controlled by a B&W spray dryer followed by a B&W/BSH Krefield 4-field electrostatic precipitator (ESP). Each precipitator has a gas flow rating of 198,000 acfm and is designed to operate with three of the four fields in service. The turbine-generator rating of 62 MW matches the full output of the boilers.

Two landfills are on this property: a Class I Landfill and a Class III Landfill, each with its own gas collection system and flare. Additional facilities include: storage and handling facilities for RDF (waste) as well as storage and handling facilities for ash and ash treatment. Also, included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V air operation permit renewal application received on May 2, 2005, this facility is a major source of hazardous air pollutants (HAP).

Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions.

E.U. ID		
Nos.	Brief Description	
Regulated	d Emissions Units and/or Activities.	
-003	Class I Landfill (1,800 scfm Flare Removed)	
-004	Class III Landfill and Existing (De-rated) Flare-1,800 scfm manufactured by	
	Parnell Biogas.	
-008	Class I Landfill and New Replacement Flare-3,500 scfm, manufactured by	
	Shaw LFG Specialties, model number CF1238I10.	
<u>-020</u>	Class III Landfill Existing Flare-1,800 scfm (Backup use only at the Class III	
	Landfill) manufactured by LFG Specialties.	
<u>-021</u>	New engine (emergency generator, < 500 hours/year) - ~220 brake HP (125	
	kW) manufactured by Caterpillar® (EPA Tier 3 certified), located at the new	
	operations building.	
Unregula	ted Emissions Units and/or Activities.	
-005	RDF Storage	
-006	RDF Processing Lines	
-007	Oversized Bulk Waste Processing Line	
-017	Woody Waste Facility Diesel Engine	
-018	Cooling Tower	

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

Solid Waste Authority of Palm Beach County North County Regional Resource Recovery Facility

### Subsection C. Relevant Documents.

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

These documents are provided to the permittee for information purposes only:

Appendix H-1, Permit History/ID Number Changes.

Statement of Basis

These documents are on file with the permitting authority:

Application for a Title V Air Operation Permit Revision received March 25, 2008.

Additional information response received June 6, 2008.

Draft Title V Air Operation Permit Revision clerked on September 3, 2008.

Public Notice published on September 8, 2008.

Comments from the applicant dated September 22, 2008, received October 1, 2008.

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

### Subsection B. This section addresses the following emissions unit.

E.U. ID		
No.	Brief Description	
-003	Class I Landfill (1,800 scfm Flare Removed)	
-004	Class III Landfill and Existing (De-rated) Flare-1,800 scfm manufactured by	
	Parnell Biogas.	
-008	Class I Landfill and New Replacement Flare-3,500 scfm, manufactured by	
	Shaw LFG Specialties, model number CF1238I10.	
<u>-020</u>	Class III Landfill Existing Flare-1,800 scfm (Backup use only at the Class III	
	Landfill) manufactured by LFG Specialties.	

The facility currently has two flares with one located at each landfill, Class I and Class III. Under this project the facility will continue to have two flares, one permanently located at each landfill. The older flare currently in use at the Class III landfill will be kept on-site and used as a backup flare only at the Class III Landfill. Each flare is rated based on a maximum heat content of 550 BTU/scfm. The gas flow rates from the Class I and Class III landfill flares are 1,839.6 million ft3/year and 946.08 million ft3/year, respectively.

Permit No. 0990234-012-AC is primarily for changes being made to the flares at the landfills, specifically: (1) the replacement of an existing flare; (2) the de-ration & relocation of an existing flare; and, (3) the conversion of one of the existing flares to back up use only.

The existing Class I Landfill Flare, a 3,500 scfm flare (Emissions Unit ID No.-008) manufactured by Parnell Biogas will be replaced in its entirety with a new similar 3,500 scfm flare manufactured by Shaw LFG Specialties, model number CF1238I10 (kept under E.U. ID No. -008).

The existing Class I Landfill Flare (formerly under Emissions Unit ID No.-008), which had begun operations in 2004 will be de-rated to a 1,800 scfm flare (now under Emissions Unit ID No. -004). This de-rated flare will be relocated and used at the Class III landfill in place of the existing Class III flare. The applicant is required to follow a de-ration schedule (see Compliance Plan).

The existing 1,800 scfm Class III Landfill Flare (formerly under E.U. ID No. -004, now under E.U. ID No. -020), which began operations in 1999, will be used as a backup only.

Both landfills have a design capacity greater than 2.5 million megagrams by mass or 2.5 million cubic meters by volume. The design capacity of the Class I Landfill is 33,212,516 megagrams by mass and the Class III Landfill is 5,723,708 megagrams by mass. The landfills commenced construction in August 1988. A minor modification was requested and approved in 1994; expanding the landfills and changing the slopes. The Class I Landfill started receiving waste in August 1989 and the Class III Landfill started receiving waste in April 1990. The yearly waste acceptance at the Class I and Class III Landfills in FY2004 was 643,501 and 203,470 Mg/yr, respectively. The NMOC emissions are calculated to be greater than 50 megagrams per year. The landfills are collocated with a major source of HAPs; individually they are not major sources of HAPs. The landfills do not contain bioreactors. The Class I Landfill received asbestos from 1989-1993. In 1993, asbestos disposal was transferred to the Class III landfill, which continues to receive the material. Collection and control of landfill gas emissions began

in February 1996 for both landfills. The Class III Landfill is expected to close by 2016 and the Class I Landfill between 2023 and 2026.

{Permitting note(s): The landfills are subject to NSPS 40 CFR 60 Subparts WWW and A, NESHAP 40 CFR 63 Subparts AAAA and A, and Rule 62-212.400(5), F.A.C.}

### The following Specific Conditions apply to the emissions units listed above:

**B.0.a.** These emissions units shall comply with **Appendix CP-1**, Compliance Plan, attached as a part of this permit.

[Rule 62-213.440(2), F.A.C. and Permit No. 0990234-012-AC]

**B.0.b.** Hours of Operation: These emissions units may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200, F.A.C., Definitions-potential to emit (PTE) and PSD-FL-108(D]

**B.0.c.** Capacity and Potential to Emit (PTE). The gas flow rates from the Class I and Class III landfill flares are limited to 1,839.6 million ft<sup>3</sup>/year and 946.08 million ft<sup>3</sup>/year, respectively. Total landfill gas flow to the flares shall be continuously measured and recorded.

[Rules 62-4.160(2), 62-210.200(PTE), and 62-4.070(3), F.A.C.; and, and Permit No. 0990234-012-AC]

**B.0.d.** The Class III Landfill Existing Flare-1,800 scfm (formerly under E.U. ID No. -004, now under E.U. ID No. -020) is limited to back up on-site use only and shall not be operated simultaneously with any of the permanent flares.

[Rules 62-4.160(2), 62-210.200(PTE), and 62-4.070(3), F.A.C.; and Permit No. 0990234-012-AC]

**B.0.e.** Sampling & Analysis of Sulfur Content of Gas. The sulfur content of each landfill's gas shall be sampled annually, analyzed and the results provided to the compliance authority with a copy to the Bureau of Air Regulation. The sulfur content each landfill's gas shall be analyzed at the inlet to the flare. ASTM method D-3246-81 ASTM Method D1072-90, or later method shall be used to determine the sulfur content of the gas. The sulfur content along with SO<sub>2</sub> emissions in tons per year (TPY) for each flare shall be included with the annual operating report (AOR). Based on the sampling results and Rule 62-297.310(7)(b), F.A.C., the Department may request additional gas sampling and analyses. [Rules 62-4.070(3) and 62-297.310, F.A.C.; and Permit No. 0990234-012-AC]

Solid Waste Authority of Palm Beach County North County Regional Resource Recovery Facility

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

### Subsection C. This section addresses the following emissions unit.

E.U. ID		
No.	Brief Description	
<u>-021</u>	New engine (emergency generator, < 500 hours/year) - ~220 brake HP (125	
	kW) manufactured by Caterpillar® (EPA Tier 3 certified), located at the new	
	operations building.	

This engine is approximately a 220 brake horsepower (HP) large bore diesel engine, equipped with a 2.5 megawatt generator, Model TBGZHJ, with a displacement of 6 L (liters). The unit is proposed to be constructed in 2008. The generator provides peak demand reduction and emergency standby power. This engine uses low sulfur diesel fuel only.

This engine is a 'new' compression ignition (CI) stationary RICE unit under the RICE MACT contained at 40 CFR 63 Subpart ZZZZ. Therefore, this MACT does apply.

### The following Specific Conditions apply to the emissions units listed above:

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

C.1. Capacity. This permit authorizes the operation of a new engine, an emergency generator, operating less than 500 hours/year, at the new operations building. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. and Permit No. 0990234-012-AC]

### **NSPS & RICE MACT Requirements**

C.2. The emergency generator, an engine, shall comply with the newly promulgated 40 CFR 63 Subpart ZZZZ, otherwise referred to as the "RICE MACT," adopted and incorporated by reference in Rules 62-204.800(11) & (8), F.A.C., attached as Appendix 40 CFR 63, Subpart ZZZZ, to this permit. Pursuant to 40 CFR 63.6590(c), tThe unit has elected to comply with the RICE MACT by meeting the requirements of the newly promulgated NSPS 40 CFR 60, Subpart IIII, attached as Appendix 40 CFR 60 Subpart IIII, to this permit. Pursuant to 40 CFR 63.6590(c), no further requirements apply to the engine under 40 CFR 63 Subpart ZZZZ.

[Rules 62-204.800(11) & (8), F.A.C.]

Proposed Permit No. 0990234-013-AV

### Appendix U-1, List of Unregulated Emissions Units and/or Activities.

<u>Unregulated Emissions Units and/or Activities</u>. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither 'regulated emissions units' nor 'insignificant emissions units'.

E.U. ID	
Nos.	Brief Description
-005	RDF Storage
-006	RDF Processing Lines
-007	Oversized Bulk Waste Processing Line
-017	Woody Waste Facility Diesel Engine
-018	Cooling Tower

### Appendix I-1, List of Insignificant Emissions Units and/or Activities.

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., <u>Categorical Exemptions</u>, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

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

Description
Fly Ash Storage Silos
Lime Storage Silos
Ash Treatment Chemical Storage Silo
Composting Facility
Ferrous processing facility
Materials recycling facility
Woody waste recycling facility
Auto spray booth

The below activities are listed by location.

Location		
Resource	Recovery	Facility

Utilities Facility Household Hazardous Waste Trash Processing, Wood Waste Mulch Processing, Yard Waste Tire Cutting Operations Activity

Emergency Diesel Generator
Diesel Fire Water Pump
Emergency Diesel Generator
Laboratory Hood
Grinder, Fugitive Dust From
Grinder, Fugitive Dust From
Diesel Generator For Segmentizer

### Appendix CP-1, Compliance Plan

Solid Waste Authority of Palm Beach County North County Regional Resource Recovery Facility Proposed Permit No. 0990234-013-AV

- **CP.1.** Compliance Plan. All of the terms and conditions of Permit Number 0990234-012-AC authorizing the changes to the flares at the facility and the installation of a new emergency generator (engine) at the new operations building, are a part of this permit.
  - a. Operation of the emissions units beyond the time frames established by the AC permit is allowed, provided the Department has received and verified properly signed and sealed certification statements from the Responsible Official (R.O.) and a licensed Florida Professional Engineer (P.E.) stating that: 1) the construction & modifications of the emissions units were completed in accordance with the AC permit; and, 2) the emissions units have been tested and compliance with the terms & conditions contained within the AC permit have properly been demonstrated prior to the expiration date of the AC permit.
  - b. The P.E. and R.O. certification statements from DEP Form No. 62-210.900(1) shall be used and must be submitted to the Department within 105 days after achieving the maximum rate at which the emissions units will be operated, but no later than 180 days after initial startup of the emissions units.
  - **c.** Provide the manufacturer specification sheets for the emergency generator (engine) purchased showing the make, model number and the exact brake hp.

[Rules 62-213.440(2), and 62-213.420(1)(a)5., F.A.C.]

### Appendix 40 CFR 63 Subpart ZZZZ (version dated 01/18/2008)

E.U. ID		
No.	Brief Description	
-021	New engine (emergency generator, < 500 hours/year) - ~220 brake HP (125 kW) manufactured by Caterpillar® (EPA Tier 3 certified), located at the new operations building.	

### **Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

[These conditions were customized internally for an owner/operator of an engine subject to 40 CFR 63 Subpart ZZZZ electing to meet 40 CFR 60 Subpart IIII.]

Source: 69 FR 33506, June 15, 2004, unless otherwise noted.

### What This Subpart Covers

### § 63.6580 What is the purpose of subpart ZZZZ?

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

### § 63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

- (a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.
- (b) A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.
- (c) An area source of HAP emissions is a source that is not a major source.
- (d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.
- (e) If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

### Appendix 40 CFR 63 Subpart ZZZZ (version dated 01/18/2008)

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008]

### § 63.6590 What parts of my plant does this subpart cover?

This subpart applies to each affected source.

- (a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.
- (1) Existing stationary RICE.
- (i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002.
- (ii) For stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.
- (iv) A change in ownership of an existing stationary RICE does not make that stationary RICE a new or reconstructed stationary RICE.
- (2) New stationary RICE. (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after December 19, 2002.
- (ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.
- (iii) A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.
- (3) Reconstructed stationary RICE. (i) A stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after December 19, 2002.
- (ii) A stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.
- (iii) A stationary RICE located at an area source of HAP emissions is reconstructed if you meet the definition of reconstruction in §63.2 and reconstruction is commenced on or after June 12, 2006.
- (b) Stationary RICE subject to limited requirements. (1) An affected source which meets either of the criteria in paragraph (b)(1)(i) through (ii) of this section does not have to meet the requirements of this subpart and of subpart A of this part except for the initial notification requirements of §63.6645(h).

### Appendix 40 CFR 63 Subpart ZZZZ (version dated 01/18/2008)

- (i) The stationary RICE is a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions; or
- (ii) The stationary RICE is a new or reconstructed limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.
- (2) A new or reconstructed stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis must meet the initial notification requirements of §63.6645(h) and the requirements of §63.6625(c), 63.6650(g), and 63.6655(c). These stationary RICE do not have to meet the emission limitations and operating limitations of this subpart.
- (3) A stationary RICE which is an existing spark ignition 4 stroke rich burn (4SRB) stationary RICE located at an area source, an existing spark ignition 4SRB stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source, an existing spark ignition 2 stroke lean burn (2SLB) stationary RICE, an existing spark ignition 4 stroke lean burn (4SLB) stationary RICE, an existing compression ignition (CI) stationary RICE, an existing emergency stationary RICE, an existing limited use stationary RICE, or an existing stationary RICE that combusts landfill gas or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.
- (c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that is a new or reconstructed stationary RICE located at an area source, or is a new or reconstructed stationary RICE located at a major source of HAP emissions and is a spark ignition 2 stroke lean burn (2SLB) stationary RICE with a site rating of less than 500 brake HP, a spark ignition 4 stroke lean burn (4SLB) stationary RICE with a site rating of less than 250 brake HP, or a 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake HP which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis, an emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake HP, or a compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake HP, must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3604, Jan. 18, 2008]

E.U. ID		
No.	Brief Description	
-021	New engine (emergency generator, < 500 hours/year) - ~220 brake HP (125 kW) manufactured by Caterpillar <sup>®</sup> (EPA Tier 3 certified), located at the new operations building.	

{Source: Federal Register Dated 7/11/06}

### **Subpart IIII--Standards of Performance for Stationary Compression Ignition Internal Combustion Engines**

[These conditions were customized internally as "Set G" for an owner/operator of a 2007 and later model, non-fire pump emergency engine, less than 10 L per cylinder.]

### **What This Subpart Covers**

60.4200 Am I subject to this subpart?

### **Emission Standards for Manufacturers**

**60.4202** What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

### **Emission Standards for Owners and Operators**

**60.4205** What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

**60.4206** How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

### Fuel Requirements for Owners and Operators

**60.4207** What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

### Other Requirements for Owners and Operators

**60.4208** What is the deadline for importing and installing stationary CI ICE produced in the previous model year?

**60.4209** What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

#### **Compliance Requirements**

**60.4211** What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

### **Testing Requirements for Owners and Operators**

**60.4212** What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder? **60.4213** What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

Notification, Reports, and Records for Owners and Operators

**60.4214** What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

### **Special Requirements**

**60.4215** What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

60.4216 What requirements must I meet for engines used in Alaska?

**60.4217** What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

### **General Provisions**

**60.4218** What parts of the General Provisions apply to me?

#### **Definitions**

**60.4219** What definitions apply to this subpart?

### **Tables to Subpart IIII of Part 60**

**Table 1** to Subpart IIII of Part 60--Emission Standards for Stationary Pre-2007 Model Year Engines with a displacement of < 10 liters per cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and with a displacement of < 10 liters per cylinder

**Table 2** to Subpart IIII of Part 60--Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE < 37 KW (50 HP) and with a Displacement of < 10 liters per cylinder

Table 3 to Subpart IIII of Part 60--Certification Requirements for Stationary Fire Pump Engines

Table 4 to Subpart IIII of Part 60--Emission Standards for Stationary Fire Pump Engines

**Table 5** to Subpart IIII of Part 60--Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

Table 6 to Subpart IIII of Part 60--Optional 3-Mode Test Cycle for Stationary Fire Pump Engines

**Table 7** to Subpart IIII of Part 60--Requirements for Performance Tests for Stationary CI ICE with a displacement of >=30 liters per cylinder

Table 8 to Subpart IIII of Part 60--Applicability of General Provisions to Subpart IIII

### Sec. 60.4200 Am I subject to this subpart?

- (a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
- (1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:
  - (i) 2007 or later, for engines that are not fire pump engines,
- (ii) The model year listed in table 3 to this subpart or later model year, for fire pump engines.
- (2) Owners and operators of stationary CI ICE that commence construction after July 11, 2005 where the stationary CI ICE are:
  - (i) Manufactured after April 1, 2006 and are not fire pump engines, or
- (ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.
- (3) Owners and operators of stationary CI ICE that modify or reconstruct their stationary CI ICE after July 11, 2005.
- (b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.
- (c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.
- (d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.

## Sec. 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

- (a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.
  - (1) For engines with a maximum engine power less than 37 KW (50 HP):
- (i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and
- (ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.
- (2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and

maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

(b) - (d) [Reserved.]

Sec. 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

- (a) [Reserved.]
- (b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in Sec. 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.
- (c) (d) [Reserved.]

Sec. 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in Sec. 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

Sec. 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

- (a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).
  - (§ 80.510 What are the standards and marker requirements for NRLM [nonroad locomotive or marine] diesel fuel?
  - (a) Beginning June 1, 2007. Except as otherwise specifically provided in 40 CFR 80 Subpart I, all NRLM diesel fuel is subject to the following per-gallon standards:
    - (1) Sulfur content. 500 parts per million (ppm) maximum.
    - (2) Cetane index or aromatic content, as follows:
      - (i) A minimum cetane index of 40; or
      - (ii) A maximum aromatic content of 35 volume percent.)
- (b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.
  - (§ 80.510 What are the standards and marker requirements for NRLM [nonroad locomotive or marine] diesel fuel?
  - (b) Beginning June 1, 2010. Except as otherwise specifically provided in CFR 80 Subpart I, all NR and LM diesel fuel is subject to the following per-gallon standards: (1) Sulfur content.
    - (i) 15 ppm maximum for NR diesel fuel.
      - (ii) 500 ppm maximum for LM diesel fuel.

- (2) Cetane index or aromatic content, as follows:
  - (i) A minimum cetane index of 40; or
  - (ii) A maximum aromatic content of 35 volume percent.)
- (c) Owners and operators of pre-2011 model year stationary CI ICE subject to this subpart may petition the Administrator for approval to use remaining non-compliant fuel that does not meet the fuel requirements of paragraphs (a) and (b) of this section beyond the dates required for the purpose of using up existing fuel inventories. If approved, the petition will be valid for a period of up to 6 months. If additional time is needed, the owner or operator is required to submit a new petition to the Administrator.
- (d) [Reserved.]
- (e) Stationary CI ICE that have a national security exemption under Sec. 60.4200(d) are also exempt from the fuel requirements in this section.

### Sec. 60.4208 What is the deadline for importing or installing stationary CI ICE produced in the previous model year?

- (a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.
- (b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.
- (c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.
- (d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.
- (e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.
- (f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.
- (g) In addition to the requirements specified in Sec. 60.4202 and Sec. 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (f) of this section after the dates specified in paragraphs (a) through (f) of this section.

(h) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

### Sec. 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in Sec. 60.4211.

- (a) If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.
- (b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in Sec. 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

### Sec. 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.

### (b) [Reserved.]

(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in Sec. 60.4205(b), you must comply by purchasing an engine certified to the emission standards in Sec. 60.4204(b), or Sec. 60.4205(b), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.

### (d) [Reserved.]

(e) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under Sec. 60.4205 but not Sec. 60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.

Sec. 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (d) of this section.

- (a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F.
- (b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.
- (c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

NTE requirement for each pollutant =  $(1.25) \times (STD)$  (Eq. 1)

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in Sec. 60.4213 of this subpart, as appropriate.

(d) [Reserved.]

Sec. 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

- (a) [Reserved.]
- (b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.
- (c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

### Florida Department of Environmental Protection

TO:

Joseph Kahn, Division of Air Resource Management

THROUGH:

Trina Vielhauer, Bureau of Air Regulation

Jon Holtom, P.E., Title V Section

FROM:

Scott M. Sheplak, P.E., Title V Section

DATE:

October 20, 2008

SUBJECT:

Air Permit No. 0990234-012-AC

Solid Waste Authority of Palm Beach County, North County Resource Recovery Facility

Air Construction Permit, Minor Source

The Final Permit for this project is attached for your approval and signature, which authorizes primarily changes being made to the flares at the landfills, specifically: (1) the replacement of an existing flare; (2) the de-ration & relocation of an existing flare; and, (3) the conversion of one of the existing flares to back up use only. The AC permit also reflects the installation of a new emergency generator at the new operations building. The proposed emergency generator is an engine which has been "Environmental Protection Agency (EPA) Tier 3 certified" according to Caterpillar<sup>®</sup>, the manufacturer.

The new equipment will be installed at 501 North Jog Road, West Palm Beach in Palm Beach County, Florida. The project results in a minor source air construction permit and is not subject to PSD preconstruction review. The Bureau of Air Regulation processed this application because we are the responsible permitting authority for this Title V source.

The attached Final Determination identifies issuance of the draft permit, summarizes the publication process, and provides the Department's response to comments on the Draft Permit. There are no pending petitions for administrative hearings or extensions of time to file a petition for an administrative hearing.

I recommend your approval of the attached Final Permit for this project.

TLV/jkh/sms

Attachments

### STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

### **NOTICE OF FINAL PERMIT**

In the Matter of an Application for Permit by:

Solid Waste Authority of Palm Beach County 7501 North Jog Road West Palm Beach, Florida 33412 Air Permit No. 0990234-012-AC North County Resource Recovery Facility Flares & Emergency Generator Palm Beach County

Authorized Representative:

Mr. Mark Hammond, Executive Director

Enclosed is the final air construction permit, which authorizes (1) replacement of an existing flare; (2) de-ration & relocation of an existing flare; and, (3) conversion of one of the existing flares to back up use only. The permittee also is authorized to install one new emergency generator at the new operations building. The proposed work will be conducted at the North County Resource Recovery Facility, which is located in Palm Beach County at 7501 North Jog Road, West Palm Beach, Florida. As noted in the attached Final Determination, only minor changes and clarifications were made to the permit as drafted. This permit is issued pursuant to Chapter 403, Florida Statutes.

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.

In thinas

Trina L. Vielhauer, Chief Bureau of Air Regulation

TLV/jkh/sms

### NOTICE OF FINAL PERMIT

### **CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Permit and Final Determination), or a link to these documents available electronically on a publicly accessible server was sent by electronic mail with received receipt requested before the close of business on 1027/08 to the persons listed below.

Mr. Mark Hammond, SWA: mhammond@swa.org

Mr. Manuel Hernandez, P.E., CDM: hernandezmj@cdm.com

Mr. Joe Lurix, DEP Southeast District Office: Joe Lurix @dep.state.fl.us

Mr. James Stormer, PBCHD: James Stormer@doh.state.fl.us

Mr. Mike Halpin, P.E., DEP Siting Coordination Office: Mike. Halpin@dep.state.fl.us

Ms. Katy R. Forney, U.S. EPA, Region 4: Forney.Kathleen@epamail.epa.gov

Ms. Barbara Friday, DEP BAR: Barbara.Friday@dep.state.fl.us (for posting with U.S. EPA, Region 4)

Ms. Victoria Gibson, DEP BAR: victoria.gibson@dep.state.fl.us (for reading file)

Clerk Stamp

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

#### FINAL DETERMINATION

#### PERMITTEE

Solid Waste Authority of Palm Beach County 7501 North Jog Road West Palm Beach, Florida 33412

### PERMITTING AUTHORITY

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

#### **PROJECT**

Air Permit No. 0990234-012-AC North County Resource Recovery Facility

This project is primarily for changes being made to the flares at the landfills, specifically: (1) the replacement of an existing flare; (2) the de-ration & relocation of an existing flare; and, (3) the conversion of one of the existing flares to back up use only. The AC permit also reflects the installation of a new emergency generator at the new operations building. The proposed emergency generator is an engine which has been "Environmental Protection Agency (EPA) Tier 3 certified" according to Caterpillar®, the manufacturer.

#### NOTICE AND PUBLICATION

The Department distributed a Written Notice of Intent to Issue Permit package on September 3, 2008. The applicant published the Public Notice of Intent to Issue in the Palm Beach Post on September 8, 2008. The Department received the proof of publication on September 10, 2008.

#### **COMMENTS**

Comments on the Draft Permit were received from the applicant.

### **Applicant**

On October 1, 2008, the Department received comments dated September 22, 2008 from the applicant. The following summarizes the comments and the Department's response to each comment. Additions to the permit are indicated below by a double underline. Deletions from the permit are indicated below by a strike through.

### **General Comment through All Documents**

1. The existing 1,800-scfm flare (New EU #020) at the Class III Landfill will only be used as a back-up at the Class III Landfill. Suggest addition of "at the Class III Landfill" after all references made to this flare being used as a back-up.

**Response:** The change is made. In the Final AC permit, the brief description for E.U. ID No. -020 is updated throughout.

The brief description of E.U. ID No. -020 is changed throughout to read as follows:

E.U. ID		
Nos.	Brief Description	
-020	Class III Landfill and Existing Flare-1,800 scfm (A	Backup use only at the Class
	III Landfill) manufactured by LFG Specialties.	

#### FINAL DETERMINATION

### **Draft Air Construction Permit – Specific Conditions**

2. Condition 2. Capacity and Potential to Emit (PTE) on page 5 of 12 limits the flow rates of the flares on a million ft<sup>3</sup>/yr basis. All previous permits have established the flow rate limits on a scfm basis. SWA and CDM request that the flow rate limits for the new air construction and Title V permit remain on a scfm basis.

**Response:** The flow rate for each flare is kept at the limited scfm basis as stated in specific condition numbers III.3. and III.4. The annual flow rates were calculated at 8,760 hours of operation per year for each flare. The ft<sup>3</sup>/yr values are moved under the emissions units description.

The emissions unit description is changed to read as follows:

The facility currently has two flares with one located at each landfill. Under this project the facility will have three flares, one permanently located at each landfill, and the older flare currently in use at the Class III landfill will be kept on-site and used as a backup flare only. The gas flow rates from the Class I and Class III landfill flares are 1,839.6 million ft<sup>3</sup>/year and 946.08 million ft<sup>3</sup>/year, respectively.

Specific condition III.2. is changed to read as follows:

- 2. <u>Capacity and Potential to Emit (PTE)</u>. The gas flow rates from the Class I and Class III landfill flares are 1,839.6 million ft3/year and 946.08 million ft3/year, respectively. Total landfill gas flow to the flares shall be continuously measured and recorded. [Rules 62-4.160(2), 62-210.200(PTE), and 62-4.070(3), F.A.C.; and, Application.]
- 3. Condition 2. also states that "Total landfill gas flow to the flares shall be continuously measured and recorded." SWA and CDM would like to clarify that, since the existing Class III flare (new EU #020) will only be used as a back-up flare, the landfill flow rates to this flare will only be continuously monitored if it is put into service due to a major malfunction of the main Class III flare (the relocated and de-rated flare (EU #004).

**Response:** When the back up flare is placed into service the total flow to this one shall be monitored and recorded. Flares typically are equipped with such monitoring and recordation. No change is made.

4. Condition 7. Sampling and Analysis of Sulfur Content of Gas on page 6 of 12 requires that ASTM method D-3246-81 be used to determine the sulfur content of the gas. We cannot find this ASTM method on the ASTM database. The current permit requires that sulfur content of the gas be determined using ASTM method D1072-90 or later method. ASTM method D5504 is the most recent method used to determine sulfur content; therefore, we would suggest keeping the current permit's wording or using ASTM method D5504.

**Response:** The permitting authority is unable to confirm the ASTM method D5504; however, specific condition **B.49.** in Permit No. 0990234-010-AV does state ASTM Method D1072-90, or later method. The test method is changed to "ASTM Method D1072-90, or later method."

Specific condition III.7. is changed to read as follows:

7. Sampling & Analysis of Sulfur Content of Gas. The sulfur content of each landfill's gas shall be sampled annually, analyzed and the results provided to the compliance authority with a copy to the Bureau of Air Regulation. The sulfur content of each landfill's gas shall be analyzed at the inlet to the flare. ASTM method D 3246-81 ASTM Method D1072-90, or later method, shall be used to determine

#### FINAL DETERMINATION

sulfur content of the gas. The sulfur content along with  $SO_2$  emissions in tons per year (TPY) for each flare shall be included with the annual operating report (AOR). Based on the sampling results and Rule 62-297.310(7)(b), F.A.C., the Department may request additional gas sampling and analyses. [Rules 62-4.070(3) and 62-297.310, F.A.C.]

5. Condition 6. on page 6 of 12 also requires that SO<sub>2</sub> calculations in tons per year (TPY) be included in the annual operating report (AOR). The SO<sub>2</sub> calculations are not part of the current AOR, and we would request that this requirement be removed.

**Response:** Specific condition **B.49.** of Permit No. 0990234-010-AV requires the actual sulfur content to be reported to the Department as an attachment to the facility's AOR. Calculating and reporting  $SO_2$  is required for reasonable assurance purposes. The claim was made that this project does not trigger PSD applicability. Modifications of the landfills, e.g., expansions, could eventually trigger PSD. Calculating  $SO_2$  from the reported sulfur content value(s) should not create much of an extra burden. The Department is requiring landfill gas to be analyzed for sulfur content and  $SO_2$  to be calculated and reported with the AOR consistent with other recent landfill permits. No change is made.

6. Condition 7. Initial Compliance Demonstration on page 6 of 12 requires that an initial compliance test be performed on the Class I and Class III flares. CDM and SWA will be performing initial compliance testing on the new Class I flare and the relocated and de-rated Class III flare. Since the existing Class III flare will only be used as a back-up at the Class III landfill, and due to the fact that it was tested for compliance during the month of August 2008 (as required by the current permit), we are requesting that FDEP not require an initial compliance test for this unit.

**Response:** The initial compliance test requirement was intended for the new and derated flare only. No change is made.

#### **OTHER**

The following Department initiated changes were made.

1. In SECTION I. FACILITY INFORMATION, the description is changed as follows.

The emergency generator, an engine (EPA Tier 3 certified), must comply with the newly promulgated 40 Code of Federal Regulations (CFR) 63, Subparts AAAA and ZZZZ, otherwise referred to as the "RICE MACT," adopted by reference in Rule 62-204.800(11), F.A.C.

### **CONCLUSION**

The final action of the Department is to issue the permit with the minor revisions, corrections, and clarifications as described above.



# Florida Department of Environmental Protection

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

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

#### **PERMITTEE**

Solid Waste Authority of Palm Beach County 7501 North Jog Road West Palm Beach, Florida 33412-2414

Authorized Representative:

Mr. Mark Hammond, Executive Director

Final Permit No. 0990234-012-AC Expiration Date: December 31, 2010

North County Resource Recovery Facility Project: Flares & Emergency Generator

### **PROJECT & LOCATION**

The applicant, the Solid Waste Authority of Palm Beach County, proposes to (1) replace an existing flare; (2) de-rate & relocate an existing flare; and, (3) convert of one of the existing flares to back up use only. The applicant also proposes to install one new emergency generator at the new operations building. The proposed emergency generator is an engine which has been "Environmental Protection Agency (EPA) Tier 3 certified" according to Caterpillar<sup>®</sup>, the manufacturer.

This existing facility consists of a *large* municipal waste combustor plant designed to process 2,000 tons per day (TPD) of municipal solid waste (MSW). This existing facility includes two boilers and two landfills, a Class I Landfill and a Class III Landfill, each with its own gas collection system and flare.

The facility, North County Resource Recovery Facility (NCRRF), is located at 7501 North Jog Road, West Palm Beach, Palm Beach County. The UTM coordinates are Zone 17; 585.8 km E; 2960.2 km N.

### STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the work specified in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department. This permit supplements all other air construction and operation permits for the subject emissions units and does not alter any requirements from such previously issued air permits.

### **APPENDICES**

The following appendices are attached as part of this permit.

Appendix GC - Construction Permit General Conditions

Appendix SC - Standard Conditions

Executed in Tallahassee, Florida

Joseph Kahn, Director

Division of Air Resource Management

Effective Date

JK/tlv/jkh/sms

### PROJECT DETAILS

The applicant, the Solid Waste Authority of Palm Beach County, proposes to (1) replace an existing flare; (2) de-rate & relocate an existing flare; and, (3) convert of one of the existing flares to back up use only. The AC permit also reflects the installation of a new emergency generator at the new operations building. The applicant also proposes to install one new emergency generator at the new operations building. The proposed emergency generator is an engine which has been "EPA Tier 3 certified" according to Caterpillar<sup>®</sup>, the manufacturer.

Further details can be found in the Technical Evaluation & Preliminary Determination and the application.

### AFFECTED EMISSIONS UNITS

The changes to the existing emission units are:

E.U. ID		
Nos.	Brief Description	
-004	Class III Landfill and Existing Flare-1,800 standard cubic feet per minute	
	(scfm) (Derated) manufactured by Parnell Biogas.	
-008	Class I Landfill and New Replacement Flare-3,500 scfm, manufactured by	
	Shaw LFG Specialties, model number CF1238I10.	

This permit authorizes the following *new* emissions unit:

E.U. ID		
Nos.	Brief Description	
-020	Class III Landfill and Existing Flare-1,800 scfm (Backup use only at the Class	
	III Landfill) manufactured by LFG Specialties.	

This permit authorizes the construction and installation of the following new emissions unit:

E.U. ID		
Nos.	Brief Description	
-021	New engine (emergency generator, < 500 hours/year) - ~220 brake horsepower (HP) (125 kilowatts (kW)) manufactured by Caterpillar® (EPA Tier 3 certified), located at the new operations building.	

The emergency generator, an engine (EPA Tier 3 certified), must comply with the newly promulgated 40 Code of Federal Regulation (CFR) 63 Subpart ZZZZ, otherwise referred to as the "RICE MACT," adopted by reference in Rule 62-204.800(11), F.A.C.

The new emergency generator uses low-sulfur diesel fuel, as required by 40 CFR 63 Subpart ZZZZ and 40 CFR 60 Subpart IIII, which reference the requirements in 40 CFR 80.510(a) (40 CFR 60.4207) (adopted by reference in Rule 62-204.800(11) & (8), F.A.C.): "(a) Beginning June 1, 2007. Except as otherwise specifically provided in this subpart, all NRLM (nonroad locomotive or marine) diesel fuel is subject to the following per-gallon standards: (1) Sulfur content. 500 parts per million (ppm) maximum. (2) Cetane index or aromatic content, as follows: (i) A minimum cetane index of 40; or (ii) A maximum aromatic content of 35 volume percent."

### REGULATORY CLASSIFICATION

<u>Title III</u>: The facility is identified as a major source of hazardous air pollutants (HAP).

<u>NESHAP</u>: The facility operates one or more units subject to National Emission Standards for Hazardous Air Pollutants of 40 CFR 63, also known as "MACT."

<u>NESHAP/NSPS</u>: The emergency generator is an engine subject to the newly promulgated 40 CFR 63, Subpart ZZZZ, otherwise referred to as the "RICE MACT." The engine, EPA Tier 3 certified, is a new reciprocating

### SECTION I. FACILITY INFORMATION

internal combustion engine (RICE) with a brake horsepower (HP) of less than 500. Under the RICE MACT the engine is required to meet the requirements of the newly promulgated NSPS 40 CFR 60, Subpart IIII. The engine is a compression ignition (CI) internal combustion engine (ICE) with a rating of approximately 220 brake HP or 125 kW.

<u>MACT</u>: A case-by case MACT was not required. Since neither the NCRRF nor the proposed project is a constructed or reconstructed major source of HAP, this rule does not apply.

<u>Title IV</u>: The facility operates no units subject to the acid rain provisions of the Clean Air Act.

<u>Title V:</u> The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

NSPS: The facility operates one or more units subject to New Source Performance Standards of 40 CFR 60.

<u>Stationary Sources - Emission Standards in Chapter 62-296, F.A.C.</u>: The facility operates one or more units subject to an emission standard.

<u>PSD</u>: The facility is an existing Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

Power Plant Siting Act: The facility is subject to power plant siting certification PA84-20.

### SECTION II. GENERAL & ADMINISTRATIVE REQUIREMENTS

### **GENERAL & ADMINISTRATIVE REQUIREMENTS**

- 1. <u>Permitting Authority</u>. All documents related to applications for permits to construct, modify or operate this emissions unit shall be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (DEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number 850/488-0114. Copies of these documents shall be submitted to the Compliance Authority.
- 2. <u>Compliance Authority</u>. All documents related to compliance activities such as reports, tests, and notifications should be submitted to the compliance authority. The compliance authority is the Department's Southeast District Office, 400 North Congress Avenue, Suite 200, West Palm Beach, FL 33401, telephone number 561/681-6600.
- 3. <u>Appendices</u>. The following Appendices are attached as part of this permit: Appendix GC (General Conditions); and, Appendix SC (Standard Conditions). General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
- 4. Applicable Regulations, Forms and Application Procedures. Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.); and Title 40, Parts 51, 52, 60, 63, 72, 73 and 75 of the Code of Federal Regulations (CFR), adopted by reference in Rule 62-204.800, F.A.C. The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
- 5. Construction and Expiration. The Department may extend the expiration date upon a satisfactory showing that an extension is justified. For good cause, the permittee may request that this air construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation at least 60 days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, 62-210.300(1), and 62-212.400(6)(b), F.A.C.]
- 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.]
- 7. <u>Modifications</u>. No emissions unit or facility subject to this permit 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.]
- 8. <u>Title V Permit</u>. This permit authorizes construction of the permitted emissions unit and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emission units. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

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

E.U. ID Nos.	Brief Description
-004	Class III Landfill and Existing ( <i>De-rated</i> ) Flare-1,800 scfm manufactured by Parnell Biogas.
-008	Class I Landfill and <i>New Replacement</i> Flare-3,500 scfm, manufactured by Shaw LFG Specialties, model number CF1238I10.
020	Class III Landfill Existing Flare-1,800 scfm ( <i>Backup use only</i> at the Class III Landfill) manufactured by LFG Specialties.

The facility currently has two flares with one located at each landfill. Under this project the facility will have three flares, one permanently located at each landfill, and the older flare currently in use at the Class III landfill will be kept on-site and used as a backup flare only. The gas flow rates from the Class I and Class III landfill flares are 1,839.6 million ft<sup>3</sup>/year and 946.08 million ft<sup>3</sup>/year, respectively.

This permit authorizes the following activities at the facility:

- Replacement of the existing Class I, 3,500 standard cubic feet per minute (scfm) flare with a new similar 3,500 scfm flare;
- Replacement of the existing Class III landfill gas flare with the existing Class I landfill gas flare, which will be de-rated to 1,800 scfm to match the permitted capacity;
- Retention of the existing Class III 1,800 scfm landfill gas flare for back up use; and,
- Addition of one emergency generator, an engine, at the new operations building.

### **SPECIFIC CONDITIONS**

- 1. Other Permits. The conditions of this permit supplement all previously issued air construction and operation permits for these emissions units. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulations. [Rule 62-4.070, F.A.C.]
- 2. Total landfill gas flow to the flares shall be continuously measured and recorded. [Rules 62-4.160(2) and 62-4.070(3), F.A.C.; and, Application.]
- 3. This permit authorizes the replacement of the Existing Class I, 3,500 scfm flare (E.U. ID No. -008) with a similar 3,500 scfm flare manufactured by Shaw LFG Specialties, model number CF1238I10 (kept under E.U. ID No. -008). [Rules 62-4.160(2), F.A.C.; and, Application.]
- 4. This permit authorizes the replacement of the Existing Class III landfill gas flare (E.U. ID No. -004) with the existing Class I landfill gas flare (formerly under E.U. ID No. -008) manufactured by Parnell Biogas, which will be de-rated to 1,800 scfm to match the permitted capacity. This flare will be relocated from the Class I landfill to the Class III landfill. [Rules 62-4.160(2), F.A.C.; and, Application.]
- 5. The Class III Landfill Existing Flare, 1,800 scfm (formerly under E.U. ID No. -004, now under E.U. ID No. -020) is limited to back up on-site use only and shall not be operated simultaneously with any of the permanent flares. [Rules 62-4.160(2), 62-210.200(PTE), and 62-4.070(3), F.A.C.; Application and Applicant request.]

### SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

- 6. <u>De-ration Schedule</u>. The below de-ration schedule shall be followed to de-rate the existing Class I Landfill gas flare (formerly from E.U. ID No. -008) from 3,500 scfm to 1,800 scfm in order to meet the permitted capacity at the Class III Landfill. The following steps shall be followed to de-rate and relocate the flare:
  - 1. The Class I Landfill gas flare skid will be moved to the location of the Class III flare at the Northeast corner of the NCRRF landfill.
  - 2. The existing 6" landfill gas piping from the Class III landfill will be connected to the 12" knockout pot of the flare skid via a 6"-to-12" HDPE increaser.
  - 3. The existing Class I Landfill gas flare skid contains two blowers connected in parallel, each able to operate at 3,500 scfm.
    - a. There are Tufline high performance butterfly valves on both the inlet and outlet side of each blower.
    - b. The flow through the skid will be determined at initial startup. It is expected that this flow will be lower than 3500 scfm due to the 6" landfill gas lines from the Class III landfill.
    - c. The butterfly valves can be hand adjusted using the circular hand levers. After initial startup, the butterfly valve on the outlet side of the blower will be adjusted until 1800 scfm is achieved. This will be done for each blower.
    - d. The handles on each butterfly valve are attached to the shaft of the internal worm gear with a roll pin. Removing the roll pin, each handle will be removed in the position in which 1800 scfm has been achieved.
    - e. Each gearbox will be opened after the removal of the handle. A small spot-weld will be placed on each side of the worm gear, permanently fixing the position of each butterfly valve.
    - f. The gearbox will be resealed.
  - 4. Using the process outlined in Step 3, a permanent solution is attained to de-rate the existing Class I Landfill gas flare for use on the Class III landfill.

[Rules 62-4.160(2), 62-210.200(PTE), and 62-4.070(3), F.A.C.; and, Application.]

- 7. Sampling & Analysis of Sulfur Content of Gas. The sulfur content of each landfill's gas shall be sampled annually, analyzed and the results provided to the compliance authority with a copy to the Bureau of Air Regulation. The sulfur content of each landfill's gas shall be analyzed at the inlet to the flare. ASTM Method D1072-90, or later method shall be used to determine the sulfur content of the gas. The sulfur content along with SO<sub>2</sub> emissions in tons per year (TPY) for each flare shall be included with the annual operating report (AOR). Based on the sampling results and Rule 62-297.310(7)(b), F.A.C., the Department may request additional gas sampling and analyses. [Rules 62-4.070(3) and 62-297.310, F.A.C.]
- 8. <u>Initial Compliance Demonstration</u>. The Class I and Class III flares shall be tested for initial compliance for visible emissions (VE). The compliance demonstration report shall be submitted within 45 days of completion of each test. The permittee shall include in the report an executive summary statement for each unit as to whether or not each flare is in compliance with the specific emission standards & limitations from Permit No. 0990234-010-AV. The actual gas flow rate during testing shall be provided in the compliance report. [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

### **Appendix SC - Construction Permit Standard Conditions**

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

### **EMISSIONS AND CONTROLS**

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

### **TESTING REQUIREMENTS**

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

### **Appendix SC - Construction Permit Standard Conditions**

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

- 11. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]
- 12. <u>Calculation of Emission Rate</u>. For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
- 13. <u>Test Procedures</u>. Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
  - a. Required Sampling Time. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
  - b. Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
  - c. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

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

### 14. Determination of Process Variables.

- 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.]

### **Appendix SC - Construction Permit Standard Conditions**

- 15. <u>Sampling Facilities</u>. The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.
- 16. <u>Test Notification</u>. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9, F.A.C.]
- 17. 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.
  - 15) Data on the types and amounts of any chemical solutions used.

### **Appendix SC - Construction Permit Standard Conditions**

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

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

#### RECORDS AND REPORTS

- 19. <u>Records Retention</u>. All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
- 20. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports (AORs) shall be submitted to the Compliance Authority by April 1<sup>st</sup> of each year (except for year 2008 before May 1, 2009). [Rule 62-210.370(2), F.A.C.]

### **Appendix GC - Construction Permit General Conditions**

- G.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.
- G.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 or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any 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.
- G.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.
- G.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.
- G.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.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
  - (a) Have access to and copy and records that must be kept under the conditions of the permit;
  - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
  - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

- G.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.

### **Appendix GC - Construction Permit General Conditions**

- 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.
- G.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.
- G.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.
- G.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.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
  - (a) Determination of Best Available Control Technology (not applicable to project);
  - (b) Determination of Prevention of Significant Deterioration (not applicable to project); and
  - (c) Compliance with New Source Performance Standards (not applicable to project).
- G.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.
- G.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.

# Appendix 40 CFR 60 Subpart IIII (version dated 07/11/2006)

# Sec. 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

(a) Owners and operators of stationary CI ICE that do not use diesel fuel, or who have been given authority by the Administrator under Sec. 60.4207(d) of this subpart to use fuels that do not meet the fuel requirements of paragraphs (a) and (b) of Sec. 60.4207, may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in Sec. 60.4202 using such fuels.

### (b) [Reserved]

### Sec. 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in Sec. Sec. 60.1 through 60.19 apply to you.

### Sec. 60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

Engine manufacturer means the manufacturer of the engine. See the definition of `manufacturer" in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

# Appendix 40 CFR 60 Subpart IIII (version dated 07/11/2006)

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means either:

(1) The calendar year in which the engine was originally produced, or

(2) The annual new model production period of the engine manufacturer if it is different than the calendar year. This must include January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year. For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was originally produced.

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

Useful life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for useful life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for useful life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

# Appendix 40 CFR 60 Subpart IIII (version dated 07/11/2006)

### **Tables to Subpart IIII of Part 60**

TABLE 1 [Reserved.]

# TABLE 2 TO SUBPART IIII OF PART 60.—EMISSION STANDARDS FOR 2008 MODEL YEAR AND LATER EMERGENCYSTATIONARY CI ICE <37 KW (50 HP) WITH A DISPLACEMENT OF <10 LITERS PER CYLINDER

[As stated in § 60.4202(a)(1), you must comply with the following emission standards]

Engine power	Emission standards for 2008 model year and later emergency stationary Cl ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/ HP-hr)			
	Model year(s)	NOX + NMHC	СО	PM
KW<8 (HP<11)	2008+	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)
8≤KW<19 (11≤HP<25)	2008+	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)
19≤KW<37 (25≤HP<50)	2008+	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)

### TABLES 3 – 4 [Reserved.]

# TABLE 5 TO SUBPART IIII OF PART 60.—LABELING AND RECORDKEEPING REQUIREMENTS FOR NEW STATIONARYEMERGENCY ENGINES

[You must comply with the labeling requirements in § 60.4210(f) and the recordkeeping requirements in § 60.4214(b) for new

emergency stationary CI ICE beginning in the following model years:]

Engine Power	Starting Model Year	
19≤KW<56 (25≤HP<75)	2013	
56≤KW<130 (75≤HP<175)	2012	
KW≥130 (HP≥175)	2011	

# Appendix H-1, Permit History/ID Number Changes.

Solid Waste Authority of Palm Beach County
North County Regional Resource Recovery Facility

Proposed Permit No. 0990234-013-AV Facility ID No. 0990234

# Permit History (for tracking purposes):

E.U.	Project		Effective	Expiration
ID No(s).	Description	Permit No.	Date	<u>Date</u>
All	Renewed Title V Permit	0990234-010-AV <sup>1</sup>	07/02/2006	07/02/2011
All	Title V Permit Revision	0990234-013-AV	ARMS Day	-
			55	

<sup>&</sup>lt;sup>1</sup> the most recently posted Title V permit on the web site.

The proposed changes to the existing emissions unit brief descriptions under 0990234-013-AV are:

E.U. ID			
Nos.	Brief Description		
-004	Class III Landfill and Existing ( <i>De-rated</i> ) Flare-1800 scfm manufactured by Parnell Biogas.		
-008	Class I Landfill and <i>New Replacement</i> Flare-3500 scfm, manufactured by Shaw LFG Specialties, model number CF1238I10.		

The proposed *new* emissions units under 0990234-013-AV are:

E.U. ID	
Nos.	Brief Description
-020	Class III Landfill Existing Flare-1800 scfm at the Class III Landfill
	(Backup use only) manufactured by LFG Specialties.
-021	New engine (emergency generator)-~220 brake HP (125 kW)
	manufactured by Caterpillar (EPA Tier 3 certified), located at new
	operations building.

To:

mhammond@swa.org

Cc:

hernandezmj@cdm.com; Lurix, Joe; 'James\_Stormer@doh.state.fl.us'; Halpin, Mike;

Forney.Kathleen@epamail.epa.gov; Gibson, Victoria; Sheplak, Scott; Walker, Elizabeth (AIR)

Subject:

SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

Attachments: 0990234-012-AVFinalPermitNotice.pdf; 0990234-013-AVProposedCoverLetter.pdf

Click on the link to the documents displayed below and send a "reply" message verifying receipt of the document(s) provided in this email; 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". We must receive verification that you are able to access the documents. Your reply will preclude subsequent e-mail transmissions to verify receipt of the documents).

Click on the following link to access the permit project documents: <a href="http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\_permit\_zip\_files/0990234.013.AV.P\_pdf.zip">http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\_permit\_zip\_files/0990234.013.AV.P\_pdf.zip</a>

Click on the following link to access the permit project documents: http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\_permit\_zip\_files/0990234.012.AC.F\_pdf.zip

This is the official notification of the Proposed Permit Revision/Final Air Construction Permit and its associated documents for the following project:

Attention: Scott Sheplak

Owner/Company Name: SOLID WASTE AUTHORITY OF PBC Facility Name: SOLID WASTE AUTHORITY OF PBC/NCRRF

Project Number: 0990234-013-AV

Permit Status: PROPOSED

Permit Activity: PERMIT REVISION Facility County: PALM BEACH

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 <a href="http://www.dep.state.fl.us/air/eproducts/apds/default.asp">http://www.dep.state.fl.us/air/eproducts/apds/default.asp</a>.

Permit project documents are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Barbara Friday

Bureau of Air Regulation

Division of Air Resource Management (DARM)

(850)921-9524

From:

System Administrator

To:

Mark Hammond

Sent:

Monday, October 27, 2008 9:45 AM

Subject:

Delivered: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

#### Your message

To:

mhammond@swa.org

Cc:

hernandezmj@cdm.com; Lurix, Joe; James\_Stormer@doh.state.fl.us; Halpin, Mike; Forney.Kathleen@epamail.epa.gov; Gibson,

Victoria; Sheplak, Scott; Walker, Elizabeth (AIR)

Subject:

SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

Sent:

10/27/2008 9:44 AM

### was delivered to the following recipient(s):

Mark Hammond on 10/27/2008 9:45 AM

From: Sent: Mark Hammond [mhammond@swa.org] Monday, October 27, 2008 11:08 AM

To:

Friday, Barbara

Subject:

RE: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

I have received the above referenced documents.

Mark Hammond

Executive Director

SWA

From: Friday, Barbara [mailto:Barbara.Friday@dep.state.fl.us]

Sent: Monday, October 27, 2008 9:44 AM

To: Mark Hammond

Cc: hernandezmj@cdm.com; Lurix, Joe; James\_Stormer@doh.state.fl.us; Halpin, Mike;

Forney.Kathleen@epamail.epa.gov; Gibson, Victoria; Sheplak, Scott; Walker, Elizabeth (AIR)

Subject: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

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Click on the following link to access the permit project documents: http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\_permit\_zip\_files/0990234.013.AV.P\_pdf.zip

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permit2k.dep.state.fl.us/adh/prod/pdf\_permit\_zip\_files/0990234.012.AC.F\_pdf.zip>

This is the official notification of the Proposed Permit Revision/Final Air Construction Permit and its associated documents for the following project:

Attention: Scott Sheplak

Owner/Company Name: SOLID WASTE AUTHORITY OF PBC Facility Name: SOLID WASTE AUTHORITY OF PBC/NCRRF Project Number: 0990234-013-AV Permit Status: PROPOSED Permit Activity: PERMIT REVISION Facility County: PALM BEACH

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/eproducts/apds/default.asp</pre>

<http://www.dep.state.fl.us/air/eproducts/apds/default.asp> > .

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

or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Barbara Friday

Bureau of Air Regulation

Division of Air Resource Management (DARM)

(850)921-9524

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on this link to the DEP Customer Survey <a href="http://survey.dep.state.fl.us/?refemail=Barbara.Friday@dep.state.fl.us">http://survey.dep.state.fl.us/?refemail=Barbara.Friday@dep.state.fl.us</a>. Thank you in advance for completing the survey.

From:

Exchange Administrator

Sent:

Monday, October 27, 2008 9:45 AM

To:

Friday, Barbara

Subject:

Delivery Status Notification (Relay)

Attachments:

ATT165379.txt; SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-

AV/0990234-012-AC





ATT165379.txt (286 B)

SOLID WASTE

THORITY OF PBC/N

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

hernandezmj@cdm.com

From:

To:

Sent:

Subject:

Hernandez, Manuel [HernandezMJ@cdm.com] undisclosed-recipients
Monday, October 27, 2008 11:14 AM
Read: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

Your message

To:

HernandezMJ@cdm.com

Subject:

was read on 10/27/2008 11:14 AM.

From: System Administrator

To: Lurix, Joe; Halpin, Mike; Walker, Elizabeth (AIR)

Sent: Monday, October 27, 2008 9:45 AM

Subject: Delivered: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

### Your message

To: 'mhammond@swa.org'

Cc: 'hernandezmj@cdm.com'; Lurix, Joe; 'James\_Stormer@doh.state.fl.us'; Halpin, Mike; 'Forney.Kathleen@epamail.epa.gov'; Gibson,

Victoria; Sheplak, Scott; Walker, Elizabeth (AIR)

Subject: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

Sent: 10/27/2008 9:44 AM

### was delivered to the following recipient(s):

Lurix, Joe on 10/27/2008 9:44 AM Halpin, Mike on 10/27/2008 9:44 AM

Walker, Elizabeth (AIR) on 10/27/2008 9:44 AM

From: Sent:

Halpin, Mike

Monday, October 27, 2008 9:50 AM Friday, Barbara

To:

Subject:

Delivered: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

Attachments:

ATT165431.txt



(153 B)

Your message was delivered to the recipient.

From:

**Exchange Administrator** 

Sent:

Monday, October 27, 2008 9:45 AM

To:

Friday, Barbara

Subject:

Delivery Status Notification (Relay)

Attachments:

ATT165378.txt; SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-

AV/0990234-012-AC





ATT165378.bxt (296 B)

SOLID WASTE

THORITY OF PBC/N

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

James\_Stormer@doh.state.fl.us

From:

To: Sent:

Subject:

James\_Stormer@doh.state.fl.us Friday, Barbara Monday, October 27, 2008 10:07 AM Read: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

Your message

To:

James\_Stormer@doh.state.fl.us

Subject:

was read on 10/27/2008 10:07 AM.

From: Mail Delivery System [MAILER-DAEMON@mseive02.rtp.epa.gov]

Sent: Monday, October 27, 2008 9:45 AM

**To:** Friday, Barbara

Subject: Successful Mail Delivery Report

Attachments: Delivery report; Message Headers

Delivery report.txt Message

Delivery report.txt Message (500 B) Headers.txt (2 KB)

Headers.txt (2 KB)
This is the mail system at host mseive02.rtp.epa.gov.

Your message was successfully delivered to the destination(s) listed below. If the message was delivered to mailbox you will receive no further notifications. Otherwise you may still receive notifications of mail delivery errors from other systems.

The mail system

<Forney.Kathleen@epamail.epa.gov>: delivery via 127.0.0.1[127.0.0.1]:10025: 250
 OK, sent 4905C5E5\_801\_106700\_4 AEF931DC013

From:

System Administrator

To:

Gibson, Victoria

Sent:

Monday, October 27, 2008 9:45 AM

Subject:

Delivered: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

#### Your message

To:

'mhammond@swa.org'

Cc:

'hernandezmj@cdm.com'; Lurix, Joe; 'James\_Stormer@doh.state.fl.us'; Halpin, Mike; 'Forney.Kathleen@epamail.epa.gov'; Gibson,

Subject:

Victoria; Sheplak, Scott; Walker, Elizabeth (AIR) SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

Sent:

10/27/2008 9:44 AM

### was delivered to the following recipient(s):

Gibson, Victoria on 10/27/2008 9:44 AM

From:

Gibson, Victoria

To:

Friday, Barbara

Sent:

Monday, October 27, 2008 9:45 AM

Subject:

Read: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

### Your message

To:

'mhammond@swa.org'

Cc:

'hernandezmj@cdm.com'; Lurix, Joe; 'James\_Stormer@doh.state.fl.us'; Halpin, Mike; 'Forney.Kathleen@epamail.epa.gov'; Gibson, Victoria; Sheplak, Scott; Walker, Elizabeth (AIR)
SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

Subject:

Sent:

10/27/2008 9:44 AM

was read on 10/27/2008 9:45 AM.

From:

System Administrator

To:

Sheplak, Scott

Sent:

Monday, October 27, 2008 9:45 AM

Subject:

Delivered: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

### Your message

To:

'mhammond@swa.org'

Cc:

'hernandezmj@cdm.com'; Lurix, Joe; 'James\_Stormer@doh.state.fl.us'; Halpin, Mike; 'Forney.Kathleen@epamail.epa.gov'; Gibson, Victoria; Sheplak, Scott; Walker, Elizabeth (AIR)

Subject:

SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

Sent:

10/27/2008 9:44 AM

### was delivered to the following recipient(s):

Sheplak, Scott on 10/27/2008 9:44 AM

From:

Sheplak, Scott

To:

Friday, Barbara

Sent:

Monday, October 27, 2008 10:58 AM

Subject:

Read: SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

### Your message

To:

'mhammond@swa.org'

Cc:

'hernandezmj@cdm.com'; Lurix, Joe; 'James\_Stormer@doh.state.fl.us'; Halpin, Mike; 'Forney.Kathleen@epamail.epa.gov'; Gibson, Victoria; Sheplak, Scott; Walker, Elizabeth (AIR)

Subject:

SOLID WASTE AUTHORITY OF PBC/NCRRF; 0990234-013-AV/0990234-012-AC

Sent:

10/27/2008 9:44 AM

was read on 10/27/2008 10:58 AM.