Solid Waste Authority of Palm Beach County

Palm Beach Renewable Energy Park

Facility ID No. 0990234
Palm Beach County

Title V Air Operation Permit Revision

Permit No. 0990234-031-AV
(2nd Revision of Title V Air Operation Permit No. 0990234-020-AV)

Permitting Authority:

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Department of Environmental Protection
Division of Air Resource Management
Office of Permitting and Compliance

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Title V Air Operation Permit Revision

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Table of Contents

Section **Page Number**

Placard Page iii

I. Facility Information.
A. Facility Description. I.-1
B. Summary of Emissions Units. I.-1
C. Applicable Requirements. I.-3

II. Facility-wide Conditions. II.-1

III. Emissions Units and Conditions.
A. E.U. ID Nos. 001, 002 & 019:
Municipal Solid Waste Boiler Nos. 1 and 2.
Ash Building and Handling System. III.A.-1
B. E.U. ID Nos. 004 & 008:
Landfills and Flares. III.B.-1
C. E.U. ID Nos. 010, 011, 012 & 014: Biosolids Pelletization Facility (BPF). III.C.-1
D. E.U. ID Nos. 016, 017, 021 & 035-043: Engines. III.D.-1

IV. Appendices. IV.-1
Appendix A, Glossary.
Appendix ATP, U.S. EPA Alternative Test Procedure Approval dated June 3, 2004.
Appendix BW, Biomedical Waste Definitions.
Appendix CAM, Compliance Assurance Monitoring Plan.
Appendix HGV, DEP Order Granting Variance for Mercury Testing dated August 25, 1997.
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.
Appendix U, List of Unregulated Emissions Units and/or Activities.

Appendix 40 CFR 60 Subpart A, NSPS General Provisions (version dated 2/5/2010).
Appendix 40 CFR 60 Subpart Cb, Emissions Guidelines (EG) and Compliance Times for Large Municipal Waste Combustors (version dated 03/24/2010).
Appendix 40 CFR 60 Subpart Eb, NSPS for Large Municipal Waste Combustors (version dated 04/21/2008).
Appendix 40 CFR 60 Subpart IIII "Generally Applicable Requirements," Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (version dated 07/11/2006).
Appendix 40 CFR 60 Subpart WWW, NSPS for Municipal Solid Waste Landfills (version dated 08/06/2009).
Appendix 40 CFR 61 Subpart A, NESHAP General Provisions (version dated 05/06/2004).
Appendix 40 CFR 61 Subpart E, NESHAP for Mercury (version dated 03/20/03).
Appendix 40 CFR 61 Subpart M "Set A," NESHAP for Asbestos (version dated 08/19/2004).
Appendix 40 CFR 63 Subpart A, NESHAP General Provisions (version dated 01/29/2008).
Appendix 40 CFR 63 Subpart AAAA, NESHAP for Municipal Solid Waste Landfills (version dated 08/06/2009).
Appendix 40 CFR 63 Subpart ZZZZ "Generally Applicable Requirements," National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (version dated 06/30/2010).

Referenced Attachments. ..... At End
DEP approval dated October 25, 2005 regarding Landfill Higher Wellhead Operating Temperature.
DEP approval dated December 13, 2005 regarding Landfill Gas Well Inactivation Plan.
Table 1, Summary of Air Pollutant Standards and Terms.
Table 2, Compliance Requirements.
Table E-1. Summary of Maintenance Requirements for Engines.
Table L-1. Summary of Monitoring Requirements for MSW Landfills (40 CFR 60, Subpart WWW and 40 CFR 63, Subpart AAAA).
Table L-2. Summary of Recordkeeping Requirements for MSW Landfills (40 CFR 60, Subpart WWW and 40 CFR 63, Subpart AAAA).
Table L-3. Summary of Compliance Reporting Requirements for MSW Landfills (40 CFR 60, Subpart WWW and 40 CFR 63, Subpart AAAA).
Table H, Permit History.
U.S. EPA letter dated July 7, 1999 regarding CAM applicability for MWCs.
U.S. EPA letter dated April 6, 2000 regarding Beryllium Containing Wastes.
U.S. EPA approval letter dated June 7, 2002 regarding Reduction in Frequency of Surface Monitoring of Methane Gas Emissions.
U.S. EPA e-mail dated January 22, 2009 regarding Testing Schedule for Fugitive Ash and HCl Emissions.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
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PERMITTEE:
Solid Waste Authority of Palm Beach County

Permit No. 0990234-031-AV
Palm Beach Renewable Energy Park
Facility ID No. 0990234
Project: Title V Air Operation Permit Revision

This project is a Title V air operation permit revision to incorporate: Permit Nos. 0990234-026-AC & -027-AC, the tray scrubber/cyclonic projects which required a CAM plan revision to incorporate the venturi scrubbers at the Biosolids Pelletization Facility (BPF); Permit No. 0990234-029-AC, the replacement Emergency Generator at the Plant Scalehouse (E.U. ID No. 037); and, to make several other miscellaneous revisions. This existing facility is located in Palm Beach County at 7501 North Jog Road, West Palm Beach; 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 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 in accordance with the terms and conditions of this permit.

Permit No. 0990234-022-AV Effective Date: January 20, 2012
Permit No. 0990234-031-AV Revision Effective Date: February 8, 2014
Renewal Application Due Date: February 22, 2016
Expiration Date: October 4, 2016

Executed in Tallahassee, Florida

Syed Arif

Digitally signed by Syed Arif
Date: 2014.02.11 15:16:37 -05'00'

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

JFK/sa/sms

Subsection A. Facility Description.

This existing facility is a 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 Babcock & Wilcox (B&W) boilers (Nos. 1 and 2) with auxiliary burners. Each boiler was designed with a maximum heat input of 427.5 MMBtu/hr and a maximum steam production rating of 324,000 lbs/hour. At a reference heating value of 5,700 Btu/lb, this is equivalent to 900 TPD of RDF per boiler. The gross nominal electric generating capacity of the facility is 62 megawatts (MW).

Two landfills, a Class I Landfill and a Class III Landfill, each with its own gas collection system and flare, are located at the facility. Additional activities at the facility include: a composting facility, material processing systems, a metals recovery system, storage and handling systems for RDF; lime storage and processing facilities; storage and handling systems for ash and ash treatment; and, cooling towers. A biosolids pelletization facility (BPF) is located adjacent to the existing landfill.

The facility is owned by the Solid Waste Authority.

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

Subsection B. Summary of Emissions Units.

E.U. ID No.	Brief Description
Regulated Emissions Units	
001	Municipal Solid Waste Boiler No. 1
002	Municipal Solid Waste Boiler No. 2
019	Ash Building and Handling System
	Landfills and Flares
004	Class III Landfill and Flare (1,800 scfm, manufactured by LFG Specialties, model number PCF820I8)
008	Class I Landfill and Flare (3,500 scfm, manufactured by Shaw LFG Specialties, model number CF1238I10)
	Biosolids Pelletization Facility (BPF)
010	BPF Sludge Dryer Train #1
011	BPF Sludge Dryer Train #2
012	BPF Recycle Material Bin and Pellet Storage Silo for Sludge Dryer Train #1
014	BPF Recycle Material Bin and Pellet Storage Silo for Sludge Dryer Train #2
	Engines
016	Emergency Generator - Biosolids Pelletization Facility (BPF) (EPA Tier 3 certified)
017	Woody Waste Facility Diesel Engine (primary engine)
021	Emergency Generator - Operations Building (EPA Tier 3 certified)

E.U. ID No.	Brief Description
035	Emergency Generator - Palm Beach Renewable Energy Park (PBREP)
036	Fire Water Pump - (PBREP)
037	Emergency Generator - (PBREP) Scalehouse (EPA Tier 3 certified)
038	Emergency Generator - Utilities Facility
039	Emergency Generator - Landfill Scalehouse E1
040	Emergency Generator - Landfill Scalehouse E2
041	Emergency Generator - MIS
042	Emergency Generator - Administration
043	Emergency Generator - Materials Recovery Facility (MRF) (EPA Tier 2 certified)
Unregulated Emissions Units and/or Activities	
005	RDF Storage
006	RDF Processing Lines
007	Oversized Bulk Waste Processing Line
018	Cooling Towers (3) at Palm Beach Renewable Energy Park {The cooling towers do no not use chromium-based water treatment chemicals.}
044	Woody Waste Facility Diesel Engine (EPA Tier 1 certified) (backup engine)

Subsection C. Applicable Requirements.

Based on the Title V air operation permit application renewal received on November 17, 2010, this facility is a major source of hazardous air pollutants (HAP). This facility is classified as a Prevention of Significant Deterioration (PSD) major facility. A summary of important applicable requirements is shown in the following table.

Applicable Requirement	E.U. ID No(s).
Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD)	001, 002 & 019 010, 011, 012 & 014
Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT)	001, 002, 019 010, 011, 012 & 014
40 CFR 60, Subpart A, New Stationary Source Performance Standards (NSPS) General Provisions	001, 002 & 019
40 CFR 60, Subpart Cb, Emissions Guidelines (EG) and Compliance Times for Large Municipal Waste Combustors	001, 002 & 019
Rule 62-296.416, F.A.C., Waste-to-Energy Facilities	001 & 002
Rule 62-210.300, F.A.C., Permits Required	004 & 008
Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD)	004 & 008
40 CFR 60, Subpart A, New Stationary Source Performance Standards (NSPS) General Provisions	004 & 008
40 CFR 60, Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills	004 & 008
40 CFR 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Asbestos	004 & 008
40 CFR 63, Subpart A, General Provisions	004 & 008
40 CFR 63, Subpart AAAA, National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills	004 & 008
40 CFR 61, Subpart E, National Emission Standards for Hazardous Air Pollutants for Mercury	010 & 011
40 CFR 64, Compliance Assurance Monitoring (CAM)	010 & 011
40 CFR 63, Subpart A, General Provisions	016, 017, 021 & 035-044
40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE)	016, 017, 021 & 035-044
40 CFR 60, Subpart A, General Provisions	016, 021, 042 & 043
40 CFR 60, Subpart IIII, NSPS for Compression Ignition Internal Combustion Engines (CI-ICE)	016, 021, 037, 042 & 043

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV., Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Not federally enforceable. 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) & 62-210.200 (Definitions), F.A.C.]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds 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.]

{Permitting note: Nothing is deemed necessary and ordered at this time.}

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b), F.A.C.]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. Chemical or water application to unpaved road and unpaved yard and landfill areas;
b. Paving and maintenance of roads, parking areas and yards;
c. Landscaping or planting of vegetation;
d. Confining abrasive blasting where possible and appropriate;
e. Unpaved roads and active unpaved areas are sprayed with a water truck;
f. Landfill areas that are closed are promptly re-vegetated;
g. Ash is quenched with water prior to landfilling; and,
h. Waste transfer trucks are tarped.

[Rule 62-296.320(4)(c), F.A.C. and proposed by applicant in Title V air operation permit renewal application received on November 17, 2010.]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements, for additional details.

FW6. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. [Rule 62-210.370(3), F.A.C.]

FW7. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by April 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The form is available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/Air/permitting/tvfee.htm. [Rule 62-213.205, F.A.C.; and, Chapter 2013-92, Section 18(11), at 11, Laws of Florida (amending Section 403.0872(11), Florida Statute (2012).]

{Permitting notes:

In addition to the change in the Title V fee submission date from March 1st to April 1st, Section 403.0872(11)(a), F.S. has been amended to require that the annual fee be calculated based upon actual emissions rather than allowable emissions, as in the past.

In light of the 2013 statutory amendment, Rule 62-213.205, Annual Emissions Fee, F.A.C. and Rule 62-213.900, Forms and Instructions, F.A.C. will likely need to be changed. Changes to these rules will affect the associated Title V annual emissions fee provisions that are cited in Specific Conditions RR1., RR6. & RR16. within Appendix RR, Facility-wide Reporting Requirements.

The Department will be exploring the development of a revision to the electronic annual operating report (e-AOR) application to automatically calculate the amount of the fee based upon actual emission information provided with the AOR. When completed, the procedures for submitting the fee and/or the submission address may change.

Be sure to check the Title V Annual Emissions Fee On-line Information Center (see above web site address) periodically for updates, especially before submitting future Title V annual emissions fee payments.}

FW8. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V air operation permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

FW9. Prevention of Accidental Releases (Section 112(r) of CAA). If and when the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: 703/227-7650.

b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68.]

Subsection A. Emissions Units 001, 002 & 019

The specific conditions in this section apply to the following emissions unit(s):

E.U. ID No.	Brief Description
001	Municipal Solid Waste Boiler No. 1
002	Municipal Solid Waste Boiler No. 2
019	Ash Building and Handling System

Description: Units 1 and 2 are identical Babcock & Wilcox MSWC units that began commercial operation on November 15, 1989. The following descriptions include the changes being made in this permit.

Boiler Type: The boiler use a moving grate to burn the RDF fuel.

Fuel: RDF

Supplementary Fuel: Natural gas is used for startup, shutdown and during combustion of low Btu waste to maintain combustor temperature.

Capacity: The permitted capacity is 324,000 pounds per hour of steam (4-hour block average) based on a unit design capacity of 900 tons per day of RDF.

Generator Nameplate Rating: 62 Megawatts (MW).

Spray Dryer Absorber (SDA): Each unit uses lime injection to control acid gas emissions.

Fabric Filter System: Each unit uses a fabric filter system to control particulate matter (PM) emissions.

Combustion Control System and OFA System: Each unit optimizes furnace conditions with an automated control system and OFA system for proper combustion while minimizing carbon monoxide (CO), nitrogen oxides (NOx) and volatile organic compounds (VOC).

SNCR System: Each unit injects urea with an SNCR system to control NOx emissions.

ACI System: Each unit injects activated carbon to adsorb metal and dioxin/furan emissions, which are then collected by the fabric filter system.

Continuous Monitors: Each unit uses the following equipment to continuously monitor the following pollutants and parameters: continuous emissions monitoring systems (CEMS) for CO, carbon dioxide (CO_2), NOx and sulfur dioxide (SO_2); continuous opacity monitoring system (COMS) for opacity; and continuous monitoring systems (CMS) for the temperature of the flue gas stream at the fabric filter inlet, the steam production rate and urea injection rate.

Stack Parameters: Units 1 and 2 each have a stack that is 250 feet tall with a diameter of 8 feet and are both surrounded by a single stack shell. The volumetric flow rates of each MSWC at permitted capacity are approximately 191,494 actual cubic feet per minute (acfm) and 116,274 dry standard cubic feet per minute (dscfm) @ 7% oxygen (O_2).

Exit Temperature: Approximately 310 ºF, as measured downstream of the SDA.

Emissions Unit ID No. 019 is the Ash Building and Handling System. Fly ash from the fabric filter system is wetted to control the dust and minimize fugitive emissions. Bottom ash from the RDF boilers is combined with the fly ash prior to going to the landfill (see Subsection III.B.). Emissions from the building are uncontrolled.

{Permitting notes: These emissions units are regulated under 40 CFR 60, Subpart Cb, Emissions Guidelines (EG) and Compliance Times for Large Municipal Waste Combustors (MWC) adopted and incorporated by reference in Rule 62-204.800(9)(b), F.A.C.; Rule 62-296.416, F.A.C., Waste-to-Energy Facilities; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) [PSD-FL-108, as amended]; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); and, Florida Electrical Power Plant Site Certifications [PA84-20].}

<u>Essential Potential to Emit (PTE) Parameters</u>

A.1. Hours of Operation. These emissions units may operate continuously (8,760 hours/year). [Rule 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.; and, Permit No. 0990234-015-AC/PSD-FL-108H.]

A.2. Capacity. The following maximum values (capacities) shall not be exceeded:

a. 324,000 lbs/hr individual MWC unit steam production on a 4-hour block arithmetic average.

The MWC units shall not be loaded in excess of their maximum operating capacity, equivalent to 2,000 TPD of mixed MSW. See 40 CFR 60.31b of Appendix 40 CFR 60, Subpart Cb and 40 CFR 60.58b(j) of Appendix 40 CFR 60, Subpart Eb for additional restrictions on capacity. [Rules 62-4.160(2) & 62-210.200 (PTE), F.A.C.; 40 CFR 60.31b & 40 CFR 60.58b(j); and, Permit No. 0990234-015-AC/PSD-FL-108H.]

A.3. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. See the "maximum demonstrated municipal waste combustor unit load" provisions of 40 CFR 60.34b(b) and 40 CFR 60.51b for additional restrictions on operating rate. [Rule 62-297.310(2), F.A.C.; and, 40 CFR 60.34b(b) & 40 CFR 60.51b.]

A.4. MWCs - Fuels. The open storage of solid waste outside of a building is prohibited. [PSD-FL-108A, specific condition 10.]

A.5. MWCs - Methods of Operation - Fuels.

a. *Allowable Fuels.*

(1) The only fuels allowed to be burned in the MWCs are mixed municipal solid waste (MSW) from RDF, with natural gas as an auxiliary fuel. Other fuels or wastes, not specifically listed herein, shall not be burned without written prior approval from the Department. Fuels or wastes specifically authorized herein do not require prior Department approval before combustion.

(2) The primary fuel for the facility is mixed municipal solid waste (MSW) from RDF, including the items and materials that fit within the definition of MSW contained in either 40 CFR 60.51b or Section 403.706(5), Florida Statutes (2010).

b. *Unauthorized Fuels.* Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW, which are described in **d.** - **f.**, below. However, the facility

(1) shall not burn:

(a) those materials that are prohibited by state or federal law;
(b) those materials that are prohibited by this permit;
(c) lead acid batteries;
(d) hazardous waste;
(e) nuclear waste;
(f) radioactive waste;
(g) sewage sludge;
(h) sewage sludge from sewage treatment plants [1];
(i) explosives;
(j) beryllium-containing waste, as defined in 40 CFR 61, Subpart C. *{The U.S. EPA letter dated April 6, 2000 (see attached), on 40 CFR 61, Subpart C further addresses the applicability of this federal regulation with regard to beryllium-containing waste(s).}*

(2) and shall not knowingly burn:

(a) untreated biomedical waste from biomedical waste generators regulated pursuant to Chapter 64E-16, F.A.C., and from other similar generators (or sources). See the attached Appendix BW, Biomedical Waste Definitions, for definitions of what constitutes biomedical waste;
(b) segregated loads of biological waste.

c. *Fuel Handling.* The fuel may be received either as a mixture or as a single-item stream (segregated load) of discarded materials. If the facility intends to use an authorized fuel that is segregated non-MSW material, the fuel shall be well mixed with MSW. For the purposes of this permit, a segregated load is defined to mean a container or truck that is almost completely or exclusively filled with a single item or homogeneous composition of waste material, as determined by visual observation.

d. *Other Solid Waste.* Subject to the conditions and limitations contained in this permit, the following other solid waste may be used as fuel at the facility:
   (1) Confidential, proprietary or special documents (including but not limited to business records, lottery tickets, event tickets, coupons and microfilm);
   (2) Contraband which is being destroyed at the request of appropriately authorized local, state or federal governmental agencies, provided that such material is not an explosive, a propellant, a hazardous waste, or otherwise prohibited at the facility. For the purposes of this section, contraband includes but is not limited to drugs, narcotics, fruits, vegetables, plants, counterfeit money, and counterfeit consumer goods;
   (3) Wood pallets, clean wood, and land clearing debris;
   (4) Packaging materials and containers;
   (5) Clothing, natural and synthetic fibers, fabric remnants, and similar debris, including but not limited to aprons and gloves; or
   (6) Rugs, carpets, and floor coverings, but not asbestos-containing materials or polyethylene or polyurethane vinyl floor coverings.

e. *Waste Tires.* Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the facility. The total quantity of waste tires received as segregated loads and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined on a calendar month basis.

f. *Non-MSW Material.* Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (i.e., the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as segregated loads and burned at the facility shall not exceed 5%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined on a calendar month basis.
   (1) Construction and demolition debris.
   (2) Oil spill debris from aquatic, coastal, estuarine or river environments. Such items or materials include but are not limited to rags, wipes, and absorbents.
   (3) Items suitable for human, plant or domesticated animal use, consumption or application where the item's shelf-life has expired or the generator wishes to remove the items from the market. Such items or materials include but are not limited to off-specification or expired consumer products, pharmaceuticals, medications, health and personal care products, cosmetics, foodstuffs, nutritional supplements, returned goods, and controlled substances.
   (4) Consumer-packaged products intended for human or domesticated animal use or application but not consumption. Such items or materials include but are not limited to carpet cleaners, household or bathroom cleaners, polishes, waxes and detergents.
   (5) Waste materials that:
      (a) are generated in the manufacture of items in categories **f.(3)** or **f.(4)**, above and are functionally or commercially useless (expired, rejected or spent); or
      (b) are not yet formed or packaged for commercial distribution. Such items or materials must be substantially similar to other items or materials routinely found in MSW.
   (6) Waste materials that contain oil from:
      (a) the routine cleanup of industrial or commercial establishments and machinery; or
      (b) spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.
   (7) Used oil and used oil filters. Used oil containing a polychlorinated biphenyls (PCB) concentration equal or greater than 50 parts per million (ppm) shall not be burned, pursuant to the limitations of 40 CFR 761.20(e).
   (8) Waste materials generated by manufacturing, industrial or agricultural activities, provided that these items or materials are substantially similar to items or materials that are found routinely in MSW, subject to written prior approval of the Department.

[Rules 62-4.070(1), (3), 62-213.410 & 62-213.440, F.A.C.; and, [1] PSD-FL-108A, specific condition 11.]

{Permitting note: At RDF plants, the 3% (or 5%) restriction applies to the municipal solid waste received. On-site processing of material at the facility is not included in this restriction. Exceedance of this percentage requires prior department approval.}

A.6. Auxiliary Burners - Methods of Operation - Fuels. Auxiliary burners for each MWC shall be fired only with natural gas. Natural gas may be used as a supplemental fuel during startups, shutdowns, and at other times when necessary and consistent with good combustion practices. [Rules 62-4.160(2), 62-210.200 (PTE), 62-213.410, & 62-213.440, F.A.C.; and, PSD-FL-108A.]

A.7. Auxiliary Gas Burner Operations.

a. During boiler startup, the auxiliary gas burners shall be operating at their maximum capacity prior to the introduction of RDF to the boilers, and shall remain in operation until the lime spray dryer absorbers and particulate matter emissions control device (fabric filter system) are fully operational.

b. During normal, non-emergency boiler shutdown, the auxiliary gas burners shall be operated at their maximum capacity until all RDF has been combusted.
[Rules 62-4.160(2), 62-210.200 (PTE), 62-213.410, & 62-213.440, F.A.C.; 0992034-015-AC/PSD-FL-108H; and, PSD-FL-108A, specific conditions 7. & 8.]

Air Pollution Control Technologies and Measures

A.8. Carbon Usage Rate. The carbon injection rate operating standard and monitoring requirements set forth in 40 CFR 60.58b(m) of 40 CFR 60, Subpart Eb, incorporated by reference in Rule 62-204.800, F.A.C., shall apply. See Appendix 40 CFR 60, Subpart Eb. [Rule 62-296.416(5), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Unless otherwise specified, the averaging times for Specific Conditions **A.9. - A.19.** are based on the specified averaging time of the applicable test method.

{Permitting note: The May 10, 2006 amendments to 40 CFR 60 Subpart Cb changed some of the emission standards and limitations for Unit Nos. 1 & 2. Five (5) air pollutant standards/limitations were lowered under the amendments: PM, cadmium (Cd), Hg, Pb and dioxin/furan (D/F).}

Stack Emissions

A.9. Particulate Matter. The emission limit for particulate matter (PM) contained in the gases discharged to the atmosphere is 25 milligrams (mg) per dry standard cubic meter, corrected to 7 percent oxygen. [Rule 62-204.800(9)(b)3.a., F.A.C.; 40 CFR 60.33b(a)(1)(i); and, PSD-FL-108A, specific condition 3.a.]

A.10. Opacity. As determined by the continuous opacity monitoring system (COMS) or EPA Method 9, the emission limit for opacity exhibited by the gases discharged to the atmosphere is 10 percent (6-minute average). [Rule 62-204.800(9)(b)3.b., F.A.C.; 40 CFR 60.33b(a)(1)(iii); and, PSD-FL-108A, specific condition 3.k. & Permit No. 0990234-015-AC/PSD-FL-108H, specific condition 17.e.]

A.11. Cadmium. The emission limit for cadmium (Cd) contained in the gases discharged to the atmosphere is 35 micrograms (ug) per dry standard cubic meter, corrected to 7 percent oxygen. [Rule 62-204.800(9)(b)3.c., F.A.C. and 40 CFR 60.33b(a)(2)(i).]

A.12. Mercury. The emission limit for mercury (Hg) contained in the gases discharged to the atmosphere is 50 micrograms per dry standard cubic meter or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent. [Rule 62-204.800(9)(b)3.d., F.A.C.; 40 CFR 60.33b(a)(3); and, PSD-FL-108A, specific condition 3.e.]

A.13. Lead. The emission limit for lead (Pb) contained in the gases discharged to the atmosphere is 400 micrograms per dry standard cubic meter, corrected to 7 percent oxygen. [Rule 62-204.800(9)(b)3.c., F.A.C.; 40 CFR 60.33b(a)(4); and, PSD-FL-108A, specific condition 3.d.]

A.14. Sulfur Dioxide. As determined by the continuous emissions monitoring system (CEMS), the emission limit for sulfur dioxide (SO_2) contained in the gases discharged to the atmosphere is 29 parts per million by volume (ppmv) or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent. Compliance with this emission limit is based on a 24-hour daily geometric mean. [Rule 62-204.800(9)(b)3.e., F.A.C.; 40 CFR 60.33b(b)(3)(i); and, PSD-FL-108A, specific condition 3.i. & Permit No. 0990234-015-AC/PSD-FL-108H, specific condition 17.d.]

A.15. Hydrogen Chloride. The emission limit for hydrogen chloride (HCl) contained in the gases discharged to the atmosphere is 25 parts per million by volume or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent. [Rule 62-204.800(9)(b)3.f., F.A.C.; 40 CFR 60.33b(b)(3)(ii); and, PSD-FL-108A, specific condition 3.j.]

A.16. Dioxin/Furan. The emission limit for dioxin/furan (D/F) contained in the gases discharged to the atmosphere from designated facilities that do not employ an electrostatic precipitator-based emission control system is 30 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen. [Rule 62-204.800(9)(b)3.g., F.A.C.; 40 CFR 60.33b(c)(1)(iii); and, 0990234-021-AC/PSD-FL-108J]

A.17. Nitrogen Oxides. As determined by the CEMS, the emission limit for nitrogen oxides (NOx) contained in the gases discharged to the atmosphere from a refuse derived fuel type municipal waste combustor technology is 250 parts per million by volume, corrected to 7 percent oxygen, dry basis. Compliance with this emission limit is based on the 24-hour daily arithmetic average of the hourly emission concentrations using continuous emission monitoring system outlet data. Emissions averaging pursuant to 40 CFR 60.33b(d)(1) shall be allowed. 40 CFR 60.33b(d)(2) shall not apply. [Rule 62-204.800(9)(b)3.h., F.A.C.; 40 CFR 60.33b(d); and, PSD-FL-108A, specific condition 3.b. & Permit No. 0990234-015-AC/PSD-FL-108H, specific condition 17.d.]

A.18. Carbon Monoxide. As determined by the CEMS:

a. the emission limit for carbon monoxide (CO) contained in the gases discharged to the atmosphere from a refuse derived fuel stoker type municipal waste combustor technology is 200 parts per million by volume (ppmvd), measured at the combustor outlet in conjunction with a measurement of oxygen concentration, corrected to 7 percent oxygen, dry basis, and calculated on a 24-hour block average. Calculated as an arithmetic average. [Rule 62-204.800(9)(b)3.i., F.A.C.; 40 CFR 60.34b(a); and, Permit No. 0990234-015-AC/PSD-FL-108H, specific condition 17.d.]

b. CO emissions shall not exceed 400 ppmvd, corrected to 7 percent oxygen, dry basis, and calculated on a 4-hour block average. [Permit No. 0990234-015-AC/PSD-FL-108H, specific conditions 3.c. & 17.d.]

A.19. Volatile Organic Compounds. Volatile organic compound (VOC) emissions shall not exceed 1.6×10^{-2} lb/MMBtu. [PSD-FL-108A, specific condition 3.h.]

Fugitive Ash Emissions

A.20. (This condition only applies to the ash conveying systems of E.U. ID No. 019.) Fugitive Ash Emissions.

a. No owner or operator of an affected facility shall cause to be discharged to the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period), as determined by EPA Reference Method 22 observations as specified in 40 CFR 60.58b(k), except as provided in paragraphs b. and c.

b. The emission limit specified in paragraph a. does not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; however, the emission limit specified in paragraph a. does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems.
c. The provisions of paragraph a. do not apply during maintenance and repair of ash conveying systems.
[Rule 62-204.800(9)(b)6., F.A.C.; and, 40 CFR 60.36b and 40 CFR 60.55b.]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C., cannot vary any requirement of an EG, NSPS or NESHAP provision.

A.21. Excess Emissions Allowed - Startup, Shutdown or Malfunction. Excess emissions resulting from startup, shutdown or malfunction 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. The Department authorizes three hours per occurrence in any 24-hour period for these emissions units. A malfunction means any unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. [Rules 62-210.700(1) & (5), F.A.C. and PSD-FL-108A, specific condition 15.]

A.22. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Continuous Monitoring Requirements

{Permitting note: The following continuous monitors are installed on these emissions units: steam flow, urea injection rate, ACI rate, inlet temperature to the fabric filter, opacity, SO_2, NOx, CO and carbon dioxide (CO_2).}

A.23.1. Steam Flow Meter. The owner or operator shall calibrate, maintain, and operate a steam flow meter or a feedwater flow meter; to measure steam (or feedwater) flow in kilograms per hour (or lbs/hour) on a continuous basis; and record the output of the monitor. Steam (or feedwater) flow shall be calculated in 4-hour block arithmetic averages. [Rule 62-213.440, F.A.C.; 40 CFR 60.34b, 40 CFR 60.53b & 40 CFR 60.58b(i)(6); and, PSD-FL-108A.]

A.23.2. Urea Injection Rate: The permittee shall calibrate, operate and maintain a CMS to continuously monitor and record the urea injection rate of each SNCR system. [0990234-015-AC/PSD-FL-108H]

A.23.3. ACI Rate: The permittee shall calibrate, operate and maintain a CMS to continuously monitor and record the ACI injection rate of each ACI system. [0990234-015-AC/PSD-FL-108H]

A.24. Inlet Temperature to Particulate Matter Control Device. The owner or operator shall calibrate, maintain, and operate a device for measuring on a continuous basis the temperature of the flue gas stream at the inlet to each particulate matter control device utilized. Temperature shall be calculated in 4-hour block arithmetic averages. [Rule 62-213.440, F.A.C.; 40 CFR 60.34b, 40 CFR 60.53b & 40 CFR 60.58b(i)(7); and, 0990234-015-AC/PSD-FL-108H]

A.25. Continuous Emissions Monitoring Systems (CEMS) Required. The owner or operator shall calibrate, operate and maintain continuous emissions monitoring systems (CEMS) for monitoring opacity, sulfur dioxide (SO_2), nitrogen oxides (NOx) and carbon monoxide (CO). [Rule 62-213.440, F.A.C.; and, 40 CFR 60.38b; 40 CFR 60.58b(c)(8) (opacity); 40 CFR 60.58b(e)(5) (SO_2); 40 CFR 60.58b(h)(4) (NOx) & 40 CFR 60.58b(i)(3) (CO).]

A.26. Oxygen (O_2) or Carbon Dioxide (CO_2) CEMS. The owner or operator shall calibrate, maintain, and operate a continuous emission monitoring system (CEMS) for measuring the oxygen or carbon dioxide content of the flue gas at each location where carbon monoxide, sulfur dioxide, or nitrogen oxides emissions are monitored and record the output of the system. [Rule 62-213.440, F.A.C. and 40 CFR 60.38b, & 40 CFR 60.58b(b).]

Test Methods and Procedures

{Permitting note: Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.27. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
EPA Methods 1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
EPA Methods 5	Methods for Determining PM Emissions
EPA Methods 6, 6A, 6C or 8	Methods for Determining SO_2 Emissions
EPA Method 7, 7A, 7B, 7C, 7D or 7E	Determination of NOx Emissions
EPA Method 9	Visual Determination of the Opacity of Emissions (VE)
EPA Method 10, 10A or 10B	Determination of CO Emissions
EPA Method 12	Determination of Pb Emissions
EPA Method 19	Determination of "F" factors used in determining heating value of RDF
EPA Method 22	Visual Determination of Fugitive Emissions from Material Sources
EPA Method 23	Measurement of D/F Emissions. Authorized to omit methylene chloride rinse.[1]
EPA Method 25 or 25A	Determination of VOC Emissions
EPA Method 26 or 26A	Determination of HCl Emissions from Stationary Sources. Changes were approved to the EPA Method 26 testing methodology.[2]
EPA Method 29	Determination of Metal (e.g., Cd, Hg and Pb) Emissions from Stationary Sources
EPA Method 101A	Determination of Hg Emissions

The above methods are described in Chapter 62-297, F.A.C. and/or 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C.; Rule 62-204.800(9)(b)7., F.A.C.; PSD-FL-108A; [1] Appendix ATP, U.S. EPA Alternative Test Procedure Approval dated June 3, 2004; and, [2] Permit No. 0990234-019-AC/PSD-FL-108I.]

A.28. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

A.29. Annual Compliance Test. The owner or operator shall conduct a performance test for PM, opacity, Cd, Hg, Pb and D/F emissions on a calendar year basis (no less than 9 calendar months and no more than 15 calendar months following the previous performance test; and must complete five performance tests in each 5-year calendar period). For each required cadmium, dioxin/furan, lead, mercury, and PM test run, the permittee shall also record and report the actual ACI rate, lime injection rate, and temperature data for the fabric filter system. The owner or operator shall conduct a performance test for HCl emissions on an annual

basis. For each required hydrochloric acid test run, the permittee shall also record and report the actual lime injection rate. [Rule 62-297.310(8), F.A.C. [Rules 62-297.310(7) & 62-204.800(9)(b)7., F.A.C. and PSD-FL-108A, specific condition 4. and PSD-FL-108H]

A.30. VOC Emission Testing. Compliance with the VOC limit shall be demonstrated by compliance with both Carbon Monoxide limits in lieu of stack testing, but should the Department feel the VOC limit is not being met, a special compliance test could be required. [0990234-021-AC/PSD-FL-108J]

A.31. Dioxins/Furans. The alternative performance testing schedule for dioxins/furans (D/F) specified in 40 CFR 60.58b(g)(5)(iii) (See Appendix 40 CFR 60, Subpart Eb) shall apply to municipal waste combustor plants that achieve a dioxin/furan emission level less than or equal to **15** nanograms per dry standard cubic meter, corrected to 7 percent oxygen. [Rule 62-204.800(9)(b)7.b, F.A.C.]

A.32. HCl Emission Testing. EPA Method 26 shall be used for the determination of hydrochloric acid concentration or other methods approved by DEP and EPA. The permittee may modify the EPA Method 26 sampling train as follows: full-size (Greenburg-Smith design) impingers may be used in lieu of midget impingers; and, the two sodium hydroxide (NaOH) impingers may be replaced with one empty impinger. [Permit No. 0990234-019-AC/PSD-FL-108I, specific condition 4.i.]

A.33. Mercury Testing Frequency. The Department's Order Granting Variance dated August 25, 1997, is a part of this permit. The variance allows the facility to test mercury emissions annually provided each future annual test demonstrates compliance. The order contains additional terms. If compliance is not demonstrated by each annual test, the Department retains the right to reinstate quarterly testing. The variance does not apply to any other new or existing state or federal rule which may require more frequent mercury testing. [Rule 62-296.416(3)(a)3., F.A.C.; and, Order Granting Variance dated August 25, 1997.]

{Permitting note: 40 CFR 60, Subpart Cb requires annual Hg testing.}

A.34. RDF Analysis. During compliance stack tests, the RDF shall be analyzed by at least two separate labs, approved by the Department, using split samples for the Btu and moisture contents. [PSD-FL-108A, specific condition 12.]

Recordkeeping and Reporting Requirements

A.35. Reporting Schedule. The following reports shall be submitted to the Compliance Authority:

Report	Reporting Deadlines	Related Conditions
Excess Emissions from Malfunctions, if requested by the Compliance Authority	Every 3 months (quarter)	**A.36.**
NSPS Excess Emissions and Monitoring System Performance	Every 6 months (semi-annual), except when more frequent reporting is specifically required	**A.46.**
EG Cb (Eb) Annual Report	Every 6 months (semi-annual)	**A.44** & **45.** Appendix Cb/Appendix Eb - 40 CFR 60.59b(g)
EG Cb (Eb) Semi-Annual Report	Every 6 months (semi-annual)	**A.44** & **45.** Appendix Cb/Appendix Eb - 40 CFR 60.59b(h)

[Rule 62-210.700(6), F.A.C.; 40 CFR 60, Subparts A, Cb & Eb.]

A.36. Excess Emissions from Malfunctions. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full

written report on the malfunctions shall be submitted in a quarterly report, if requested by the Compliance Authority. [Rule 62-210.700(6), F.A.C.]

A.37. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

A.38. Records of Non-MSW. The facility owner or operator shall prepare and maintain records concerning the description and quantities of all segregated loads of non-MSW material which are received and used as fuel at the facility, and subject to a percentage weight limitation (see Specific Conditions **A.5.e.** and **A.5.f.**). The following records shall be prepared and maintained to demonstrate compliance with the segregated non-MSW percentage limitations:

a. *Segregated Loads of non-MSW Materials*. Each segregated load of non-MSW materials, that is subject to the percentage weight limitations (see Specific Conditions **A.5.e.** and **A.5.f.**), which is received for processing shall be documented as to the description and weight of the waste. The weight of all waste materials received for processing shall be measured using the facility truck scale and recorded.

b. *Waste Tires*. Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of tires shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation.

c *Non-MSW Material*. Each day the total weight of segregated non-MSW materials received that are subject to the 5% restriction shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of segregated non-MSW materials subject to the 5% restriction shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 5% limitation.

[Rules 62-4.070(1), (3), 62-213.410 & 62-213.440, F.A.C.]

A.39. Daily Waste Logs Required. The permittee shall maintain a daily log of the municipal solid waste received. Such a log must record, at a minimum, the amount of waste, the time, and the type of waste received. [PSD-FL-108A, specific condition 18. and Rule 62-213.440, F.A.C.]

A.40. Reporting and Recordkeeping. The reporting and recordkeeping requirements applicable to each municipal waste combustor unit subject to Rule 62-204.800(9)(b), F.A.C., shall be the same as set forth in 40 CFR 60.59b, except for the siting requirements under 40 CFR 60.59b(a), (b)(5) and (d)(11). See Appendix 40 CFR 60, Subpart Eb. [Rule 62-204.800(9)(b)7.b, F.A.C.]

Operator Practices, Training and Certification

A.41. Operating Practices. The owner or operator shall comply with the operating practices as set forth in 40 CFR 60.53b(b) and (c). [Rule 62-204.800(9)(b)4., F.A.C.; and, 40 CFR 60.34b & 40 CFR 60.53b.]

A.42. Operator Training and Certification. The owner or operator shall comply with the operator training and certification requirements of 40 CFR 60.54b. Compliance with these requirements shall be conducted according to the schedule specified in 40 CFR 60.39b(c)(4). [Rule 62-204.800(9)(b)5., F.A.C.; and, 40 CFR 60.35b & 40 CFR 60.54b.]

EG 40 CFR 60, Subpart Cb Requirements

A.43. EG Requirements - General Applicability and Definitions. These emissions units shall comply with all applicable requirements of 40 CFR 60, Emission Guidelines and Compliance Times which have been adopted by reference in Rule 62-204.800(9), F.A.C., except that the term "Administrator," when used in any provision

of 40 CFR 60 that is delegated to the Department by the U.S. Environmental Protection Agency, shall mean the Secretary or the Secretary's designee. [Rule 62-204.800(9)(a), F.A.C.]

A.44. EG Requirements - Subpart Cb. These emissions units shall comply with all applicable requirements of 40 CFR 60, Subpart Cb, Emissions Guidelines (EG) and Compliance Times for Large Municipal Waste Combustors, which have been adopted and incorporated by reference in Rule 62-204.800(9), F.A.C. These emissions units shall comply with Appendix 40 CFR 60 Subpart Cb included with this permit. [Rule 62-204.800(9)(b), F.A.C.]

NSPS 40 CFR 60, Subpart A & Eb Requirements

{Permitting notes: The EG 40 CFR 60, Subpart Cb, cross references conditions (applicable requirements) that are contained in the NSPS 40 CFR 60, Subparts A and Eb.}

A.45. NSPS Requirements - Subpart Eb. Except as otherwise provided in this permit, these emissions units shall comply with all applicable provisions of 40 CFR 60, Subpart Eb, Large Municipal Waste Combustors, adopted and incorporated by reference in Rule 62-204.800(8)(b), F.A.C.; except that the Secretary is not the Administrator for purposes of the authorities cited at 40 CFR 60.50b(n). These emissions units shall comply with all applicable provisions of Appendix 40 CFR 60 Subpart Eb included with this permit. [Rule 62-204.800(8)(b)7., F.A.C.]

A.46. NSPS Requirements - Subpart A. This emissions unit shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:

40 CFR 60.7, Notification and Recordkeeping
40 CFR 60.8, Performance Tests
40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting Requirements,

which have been adopted by reference in Rule 62-204.800(8)(d), F.A.C.; except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. This emissions unit shall comply with all applicable provisions of Appendix 40 CFR 60 Subpart A included with this permit. [Rule 62-204.800(8)(d), F.A.C.]

Other Requirements

A.47. Acid Rain Part Application. For any unit which is a solid waste incinerator, burning less than 20 percent fossil fuel as described in 40 CFR 72.6(b)(7), adopted and incorporated by reference at Rule 62-204.800, F.A.C., the designated representative of the source containing the unit shall submit a complete Acid Rain Part application governing such unit to the Department before March 1st of the year following the three calendar year period in which the incinerator consumed 20 percent or more fossil fuel on a British thermal unit (BTU) basis. [Rule 62-214.320(1), F.A.C.]

Subsection B. Emissions Units 004 & 008

The specific conditions in this section apply to the following emissions units:

E.U. ID No.	Brief Description
004	Class III Landfill and Flare (1,800 scfm, manufactured by LFG Specialties, model number PCF820I8)
008	Class I Landfill and Flare (3,500 scfm, manufactured by Shaw LFG Specialties, model number CF1238I10)

The facility currently has two contiguous landfills, a Class I landfill and a Class III landfill, each with its own gas collection system and flare.

Both landfills have a design capacity greater than 2.5 million megagrams (Mg) by mass or 2.5 million cubic meters by volume. The design capacity of the Class I landfill is 33,212,516 Mg by mass and the Class III landfill is 5,723,708 Mg 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 fiscal year (FY) 2004 was 643,501 and 203,470 Mg/yr, respectively. The Class I landfill currently accepts both municipal solid waste and ash from the resource recovery facility. The Class III landfill accepts predominately construction and demolition (C&D) debris. 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.

Non-methane organic compound (NMOC) emissions from each landfill were calculated to be greater than 50 Mg per year, therefore, gas collection and control systems were required. Collection and control of landfill gas emissions began in February 1996 for both landfills.

The facility has two flares with one located at each landfill. The flares are used to control emissions from the landfills. The gas flow rates from the Class I and Class III landfill flares are 1,839.6 million ft^3/year and 946.08 million ft^3/year, respectively. Each flare is rated based on a maximum heat content of 550 Btu/scfm. The Class I landfill flare, a 3,500 scfm flare (Emissions Unit ID No. 008) was manufactured by Shaw LFG Specialties, model number CF1238I10 and began operations on May 15, 2008. The Class III landfill flare, a 1,800 scfm flare (Emissions Unit ID No. 004) was manufactured by LFG Specialties, model number PCF820I8 and began operations in 1999.

The landfills are collocated with a major source of HAP; however, individually they are not major sources of HAP. The landfills do not contain bioreactors.

The Class III landfill is expected to close by 2016 and the Class I landfill between 2023 and 2026.

{Permitting note(s): These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required; 40 CFR 60, Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills adopted by reference in Rule 62-204.800(8)(b), F.A.C.; 40 CFR 63, Subpart AAAA, National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills adopted by reference in Rule 62-204.800(11)(b)59., F.A.C.; and, 40 CFR 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Asbestos adopted by reference in Rule 62-204.800(10)(b), F.A.C. The flares are regulated under the NSPS 40 CFR 60, Subpart A, General Provisions, specifically at 40 CFR 60.18(b), adopted by reference in Rule 62-204.800(8)(d), F.A.C.}

Essential Potential to Emit (PTE) Parameters

B.1. Hours of Operation. These emissions units may operate continuously (8,760 hours/year). [Rule 62-210.200 (Definitions - Potential to Emit (PTE), F.A.C. and Permit No. 0990234-002-AC/PSD-FL-108D.]

B.2. Flares - Landfill Gas Flow Rate. The owner or operator shall not allow more than 3,500 scfm of landfill gas to be directed to the Class I flare and 1,800 scfm of landfill gas to be directed to the Class III flare. [Rule 62-4.070(3), F.A.C., and Permit No. 0990234-002-AC/PSD FL-108D, specific condition 3.]

Landfills - Collection and Control System Design Plan

B.3. Landfills - Collection and Control System Design Plan. As an amendment to the gas collection and control plan, the owner requested and received approval from the Department for alternative provisions to inactivate gas wells. The owner or operator shall inactivate gas wells in accordance with the plan approved by the Department. [Rule 62-204.800(8)(b)75., F.A.C.; 40 CFR 60.752(b)(2)(i) & 40 CFR 60.753(b); Class I and Class III Landfill Gas Well Inactivation Plan received September 19, 2005; and, DEP approval dated December 13, 2005.]

Landfills - Collection System Temperature, Oxygen and Nitrogen Requirements

B.4. Landfills - Collection System Temperature, Oxygen and Nitrogen Requirements. The permittee requested and received approval from the Department to establish a higher landfill gas temperature of 82.2º C for the interior wellhead in the gas collection system. The owner or operator shall operate each interior wellhead in the collection system with a landfill gas temperature less than 82.2º C. [Rule 62-204.800(8)(b)75., F.A.C.; 40 CFR 60.753(c); and, DEP approval dated October 25, 2005.]

Landfills - Surface Methane Requirements

B.5. Landfills - Surface Methane Requirements. The permittee requested and received approval from the USEPA to reduce the frequency of surface monitoring of methane gas emissions. The frequency of surface monitoring of methane gas emissions shall be annual for the Class III Landfill, provided that the methane concentration level remains below 250 parts per million (ppm). If the methane concentration equals or exceeds 250 ppm, then the surface monitoring shall revert back to a quarterly monitoring frequency. If no readings of 250 ppm or greater are detected in three consecutive subsequent quarterly samples, the frequency shall again become annual. Note that although quarterly monitoring shall be required if the methane concentration equals or exceeds 250 ppm, corrective action measures, as required by 40 CFR 60.755(c)(4), shall only be required when the concentration level equals or exceeds 500 ppm or more above background at any location. [Rule 62-204.800(7)(b), F.A.C.; 40 CFR 60.755(c)(1); USEPA approval dated June 7, 2002; and, Permit No. 0990234-005-AC/PSD-FL-108E, specific condition 2.]

Flares - General Control Device Requirements

B.6. Flares - Operation. The flares shall be operated with a flame present at all times, as determined by the methods specified in 40 CFR 60.18(f). [Rule 62-204.800(8)(d), F.A.C.; and, 40 CFR 60.18(c)(2)]

B.7. Flares - Exit Velocity. The flares shall be operated with an exit velocity, in accordance with 40 CFR 60.18(c)(4) and (5), as determined by the methods specified in 40 CFR 60.18(f)(4) and (f)(6). [Rule 62-204.800(8)(d), F.A.C.; and, 40 CFR 60.18(c)(4) & (5)]

B.8. Flares - Actual Exit Velocity. The owner or operator shall annually determine the actual exit velocity of each flare. [Permit No. 0990234-002-AC/PSD FL-108D, specific condition 5.]

B.9. Flares - Operation. Flares used to comply with provisions of 40 CFR 60, Subpart A shall be operated at all times when emissions may be vented to them. [Rule 62-204.800(8)(d), F.A.C.; and, 40 CFR 60.18(e)]

Emission Limitations and Standards

B.10. Flares - Visible Emissions. The flares shall be operated with no visible emissions (VE), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [Rule 62-204.800(8)(d), F.A.C.; and, 40 CFR 60.18(c)(1).]

Monitoring Requirements

{Permitting note: TABLE L-1. SUMMARY OF MONITORING REQUIREMENTS FOR MSW LANDFILLS under 40 CFR 60, Subpart WWW and 40 CFR 63, Subpart AAAA, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.11. Flares - Landfill Gas Flow Rate. Total landfill gas flow to the flares shall be continuously measured and recorded. [Rules 62-4.160(2) & 62-4.070(3), F.A.C.; and, Permit No. 0990234-012-AC, specific condition 2.]

B.12. Flares - Landfill Gas Flow Rate. The actual flow rate shall be determined for each flare on a monthly average basis by dividing the measured flow by the hours that each flare was operated each month. Compliance with this limitation shall be by measuring landfill gas flows to each flare and recording flows with a totalizing meter. Records of the totalizing meter values shall be recorded in an operators log monthly, or whenever the meter is reset for any purpose, whichever is more frequent. The owner or operator shall maintain a strip chart recorder to record the flow rate to each flare as a backup device in the event that the totalizer meter is not functioning; the strip chart recorder shall also be used in conjunction with an operators log to document the hours each month that each flare was operated. [Rule 62-4.070(3), F.A.C., and Permit No. 0990234-002-AC/PSD FL-108D, specific condition 3.]

B.13. Sampling & Analysis of Sulfur Content of Landfill 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. 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.; Permit No. 0990234-012-AC, specific condition 7.; and, Permit No. 0990234-002-AC/PSD FL-108D, specific condition 5.]

B.14. Startup, Shutdown and Malfunction Plan under NESHAP 40 CFR 63, Subpart AAAA. The owner or operator shall follow the written startup, shutdown and malfunction plan (SSM Plan). A copy of the SSM Plan must be maintained on site. [Rule 62-204.800(11)(d)1., F.A.C. and 40 CFR 63.1960.]

Test Methods and Procedures

B.15. Flares - Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
ASTM Method D1072-90, or later method	Sulfur Content Analysis of Landfill Gas
ASTM D1945-03 [1]	Alternative Method of Determining Net Heating Value of Landfill Gas
In-place Calibrated Flow Meter [1]	Determining Flare Gas Exit Velocity
EPA Method 22	Visual Determination of Smoke Emissions from Flares

The above methods are described in Chapter 62-297, F.A.C. and/or 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C. & Rule 62-204.800(9)(b)7., F.A.C.; Permit No. 0990234-002-AC/PSD FL-108D, specific condition 5.; and, [1] USEPA approval dated August 10, 2005.]

B.16. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

B.17. Annual Compliance Test. During each federal fiscal year (October 1st to September 30th), the flares shall be tested to demonstrate compliance with the emission limitations for VE. [Rule 62-297.310(7), F.A.C.]

B.18. Flares - Determining Net Heating Value of Landfill Gas. The owner or operator requested and received approval from USEPA for an alternative method of determining the net heating value of the gas being combusted in the flares. ASTM D1945-03 shall be used in place of EPA Method 18. A minimum collection of three (3)-thirty (30) minute samples is required. The requirement to test for hydrogen with ASTM D1946

is waived due to the low levels of hydrogen in the landfill gas. [Rule 62-204.800(8)(d), F.A.C.; 40 CFR 60.18(f)(3); and, USEPA approval dated August 10, 2005.]

B.19. Flares - Determining Flare Gas Exit Velocity. The owner or operator requested and received approval from USEPA for an alternative method of determining the flare gas exit velocity. The in-place calibrated flow meter shall be used in place of EPA Methods 2, 2A, 2C, or 2D. [Rule 62-204.800(8)(d), F.A.C.; 40 CFR 60.18(f)(4); and, USEPA approval dated August 10, 2005.]

B.20. Flares - Visible Emission Test Method. EPA Method 22 shall be used to determine the compliance with the visible emission limit for the flares. The observation period is 2 hours and shall be used according to EPA Method 22. [Rule 62-204.800(8)(d), F.A.C.; and, 40 CFR 60.18(f)(1).]

B.21. Flares - Sulfur Content of Landfill Gas. The owner or operator shall annually analyze the sulfur content of the landfill gas directed to each flare using ASTM Method D1072-90, or later method. [Permit No. 0990234-002-AC/PSD FL-108D, specific condition 5.]

Recordkeeping and Reporting Requirements

{Permitting note: TABLE L-2. SUMMARY OF RECORDKEEPING REQUIREMENTS FOR MSW LANDFILLS under 40 CFR 60, Subpart WWW and 40 CFR 63, Subpart AAAA, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

{Permitting note: TABLE L-3. SUMMARY OF COMPLIANCE REPORTING REQUIREMENTS FOR MSW LANDFILLS under 40 CFR 60, Subpart WWW and 40 CFR 63, Subpart AAAA, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.22. Reporting Schedule. The following reports shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition
Semi-Annual Compliance Reports	Every 6 months, due March 1st and September 1st	**B.24.**

[Rule 62-213.440, F.A.C.]

B.23. Flares - Reporting Requirements. The owner or operator shall annually report the actual exit velocity of each flare and the sulfur content of the landfill gas directed to each flare. The actual exit velocity shall be reported to the Department as an attachment to the facility's annual operating report (AOR). The sulfur content along with SO_2 emissions in tons per year (TPY) for each flare shall also be included with the AOR. [Permit No. 0990234-002-AC/PSD FL-108D, specific condition 5.]

B.24. Landfills - Semi-Annual Compliance Reports under NESHAP 40 CFR 63, Subpart AAAA. The owner or operator shall submit semi-annual compliance reports. The semi-annual compliance reports shall be due March 1st and September 1st. [Rule 62-204.800(11)(d)1., F.A.C.; 40 CFR 63.1980(a); and, Applicant's Request.]

B.25. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

NSPS 40 CFR 60, Subpart A & WWW Requirements

B.26. NSPS Requirements - Subpart WWW. Except as otherwise provided in this permit, these emissions units shall comply with all applicable provisions of 40 CFR 60, Subpart WWW, Municipal Solid Waste Landfills, adopted by reference in Rule 62-204.800(8)(b), F.A.C.; except that the Secretary is not the Administrator for purposes of 40 CFR 60.754(a)(5). These emissions units shall comply with all applicable provisions of **Appendix 40 CFR 60 Subpart WWW** included with this permit. [Rule 62-204.800(8)(b)75., F.A.C.]

B.27. NSPS Requirements - Subpart A. These emissions units shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:
40 CFR 60.7, Notification and Recordkeeping

40 CFR 60.8, Performance Tests
40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting Requirements,

which have been adopted by reference in Rule 62-204.800(8)(d), F.A.C.; except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. These emissions units shall comply with all applicable provisions of **Appendix 40 CFR 60 Subpart A** included with this permit. [Rule 62-204.800(8)(d), F.A.C.]

NESHAP 40 CFR 61, Subpart A & M - Asbestos Disposal Site Standards

B.28. NESHAP 40 CFR 61 Requirements - Subpart M [Set A]. The asbestos waste disposal sites shall comply with all applicable requirements of 40 CFR 61, Subpart M, National Emission Standard for Asbestos, which have been adopted by reference in Rule 62-204.800(10)(b), F.A.C.; except that the Secretary is not the Administrator for the purposes of 40 CFR 61.149(c)(2), 40 CFR 61.150(a)(4), 40 CFR 61.151(c), 40 CFR 61.152(b)(3), 40 CFR 61.154(d), and 40 CFR 61.155(a). These emissions units shall comply with all applicable provisions of **Appendix 40 CFR 61, Subpart M "Set A,"** included with this permit. [Rule 62-204.800(10)(b)8., F.A.C.]

B.29. NESHAP 40 CFR 61 Requirements - Subpart A. The asbestos waste disposal sites shall comply with all applicable requirements of 40 CFR 61, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(10)(d), F.A.C.; except for 40 CFR 61.08 and except that the Secretary is not the Administrator for the purposes of 40 CFR 61.04, 40 CFR 61.11, and 40 CFR 61.18. In lieu of the process set forth in 40 CFR 61.08, the Department will follow the permit processing procedures of Rule 62-4.055, F.A.C. The asbestos waste disposal sites shall comply with all applicable provisions of **Appendix 40 CFR 61 Subpart A - General Provisions** included with this permit. [Rule 62-204.800(10)(d), F.A.C.]

NESHAP (MACT) 40 CFR 63, Subpart A & AAAA Requirements

*{Permitting note: Most of the requirements of NESHAP 40 CFR 63, Subpart AAAA cross references conditions (applicable requirements) that are contained in NSPS 40 CFR 60, Subpart WWW. However, NESHAP 40 CFR 63, Subpart AAAA does include several additional requirements, most importantly the requirement to develop and implement a written startup, shutdown and malfunction plan (SSM Plan) (see 40 CFR 63.1960 in **Appendix 40 CFR 63 Subpart AAAA**, and 40 CFR 63.6(e)(3) in **Appendix 40 CFR 63 Subpart A**), and the requirement for submittal of a semi-annual compliance report (see 40 CFR 60.757(f) in **Appendix 40 CFR 60 Subpart WWW** and 40 CFR 63.1980 in **Appendix 40 CFR 63 Subpart AAAA**).)}*

B.30. 40 CFR 63 Requirements - Subpart A. These emissions units shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. These emissions units shall comply with **Appendix 40 CFR 63 Subpart A** included with this permit. [Rule 62-204.800(11)(d)1., F.A.C.]

B.31. 40 CFR 63 Requirements - Subpart AAAA. These emissions units shall comply with all applicable requirements of 40 CFR 63, Subpart AAAA, Municipal Solid Waste Landfills, which have been adopted by reference in Rule 62-204.800(11)(b)59., F.A.C., except that the Secretary is not the Administrator for purposes of the authorities cited at 40 CFR 63.1985(c). These emissions units shall comply with **Appendix 40 CFR 63 Subpart AAAA** included with this permit. [Rule 62-204.800(11)(b)59., F.A.C.]

The specific conditions in this section apply to the following emissions units:

E.U. ID No.	Brief Description
	Biosolids Pelletization Facility (BPF)
010	BPF Sludge Dryer Train #1
011	BPF Sludge Dryer Train #2
012	BPF Recycle Material Bin and Pellet Storage Silo for Sludge Dryer Train #1
014	BPF Recycle Material Bin and Pellet Storage Silo for Sludge Dryer Train #2

The BPF has two 337.5 wet tons per day (wtpd) {67.5 dry tpd} sludge drying trains, Dryer Train #1 and #2, and related appurtenances. The sludge dryer trains were manufactured by Baker Rullman Drum Assembly, Model No. SD-125-42. Each dryer train at the BPF combusts landfill gas generated from the nearby landfill and/or natural gas in a rotary drum dryer to dry sewage sludge and then screens the dried sludge into marketable fertilizer pellets. Each dryer has a rated capacity of 40 MMBtu/hour heat input (natural gas or landfill gas) plus an additional 2 MMBtu/ hour heat input from each regenerative thermal oxidizer (RTO) for a total rated capacity of 84 MMBtu/ hour heat input from the dryers and the RTOs.

Dry low NOx burners and acid addition in the tray/condenser scrubber are used to control NOx emissions from each dryer's exhaust. A tray/condenser scrubber and a venturi scrubber are used to control PM emissions from each dryer's exhaust. The BPF uses a regenerative thermal oxidizer (RTO) on each dryer exhaust to control VOC emissions with an efficiency of 98%. The RTO also minimizes odors. VOCs are also combusted in the dryer burners with an estimated efficiency of 98%. CO emissions are controlled by good combustion in the dryer and in the RTO.

Each dryer RTO train has its own flue within a shared single stack. The stack parameters are: height, 138 feet; diameter, 2.5 feet; exit temperature, 194 degrees F; and, actual stack gas flow rate, 15,000 acfm. The sludge dryer trains began operation on May 22, 2009.

Each biosolids dryer train also has the following: a recycle material bin and pellet storage silo, and a cooling tower. Dusty air from silo filling operations is ducted to each recycle bin baghouse. Material captured by each baghouse is returned back into the process/operation. Each recycle material bin baghouse vents through a building odor scrubber which exhausts through an approximately 0.5 feet diameter outlet at about 50 feet above grade. Emissions from the cooling towers are uncontrolled.

{Permitting note(s): The sludge drying trains are regulated under 40 CFR 61, Subpart E, National Emission Standards for Hazardous Air Pollutants for Mercury, adopted and incorporated by reference in Rule 62-204.800(10)(b)3., F.A.C. and 40 CFR 64, Compliance Assurance Monitoring (CAM). The sludge drying trains are <u>not</u> regulated under 40 CFR 60, Subpart LLLL, Standards of Performance for New Stationary Sources: Sewage Sludge Incineration Units and 40 CFR 60, Subpart MMMM, Emission Guidelines for Existing Sources: Sewage Sludge Incineration Units pursuant to the specific exemptions at 40 CFR 60.4780 and 40 CFR 60.5065. Some of these emissions units are regulated under Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) [PSD-FL-108F, G & I and, Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT).}

<u>Essential Potential to Emit (PTE) Parameters</u>

C.1. <u>Hours of Operation</u>. These emissions units may operate continuously (8,760 hours/year). [Rule 62-210.200 (Definitions - Potential to Emit (PTE), F.A.C. and Permit No. 0990234-006-AC/PSD-FL-108F.]

C.2. <u>Permitted Capacity</u>. The maximum process rate for each dryer train is 337.5 wet tons of sludge per day (wtpd, at 20% solids) or 67.5 dry tpd. The maximum process rate for the Biosolids Pelletization Facility (BPF) is 675 wet tons of sludge per day (wtpd, at 20% solids) or 135 dry tpd. The maximum heat input rate for each dryer and RTO are as follows:

E.U. ID No.	Brief Description	Max. Heat Input (Natural or Landfill Gas)
010	BPF Sludge Dryer Train #1	42 MMBtu/hour
011	BPF Sludge Dryer Train #2	42 MMBtu/hour

[Rules 62-4.160(2) & 62-210 (PTE), F.A.C. and Permit Nos. 0990234-006-AC/PSD-FL-108F & 0990234-019-AC/PSD-FL-108I.]

C.3. Methods of Operation - Fuels. The dryers may be fired with natural gas and/or landfill gas. [Rules 62-4.160(2) & 62-210.200 (PTE), F.A.C. and Permit Nos. 0990234-006-AC/PSD-FL-108F & 0990234-019-AC/PSD-FL-108I.]

C.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

Monitoring of Operations

C.5. Sludge Process Rate. The owner or operator shall monitor and record daily the sludge process rate for each dryer train. [Rule 62-4.070(1) & (3), F.A.C.; and, Permit No. 0990234-006-AC/PSD-FL-108F.]

Operation and Maintenance of Air Pollution Control Technologies

C.6. Operation and Maintenance of Air Pollution Control Technologies. The owner or operator shall operate and maintain the selected air pollution control technologies, e.g., dry low NOx burners, exhaust gas recirculation system, tray scrubber/condenser scrubber, venturi scrubbers and RTOs. [BACT Determination and Permit No. 0990234-006-AC/PSD-FL-108F.]

C.7. Operation and Maintenance of Fabric Filters. The owner or operator shall operate and maintain fabric filters on each material recycle bin exhaust to control PM emissions from the material recycle bin and the pellet storage silo. [BACT Determination and Permit No. 0990234-006-AC/PSD-FL-108F.]

C.8. Operation and Maintenance Manuals. The owner or operator shall follow the manufacturers' Operation and Maintenance Manuals for the selected air pollution control technologies, e.g., dry low NOx burners, exhaust gas recirculation system, tray scrubber/condenser scrubber, venturi scrubber, RTOs and fabric filters. [BACT Determination and Permit No. 0990234-006-AC/PSD-FL-108F.]

Emission Limitations and Standards

{Permitting note: Table 1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Unless otherwise specified, the averaging times for Specific Conditions **C.9. - C.17.** are based on the specified averaging time of the applicable test method.

C.9. Nitrogen Oxides. NOx emissions from each sludge dryer RTO train shall not exceed 5.60 lbs/hour and 24.55 tons/year. [BACT Determination and Table AP-1 from Permit No. 0990234-006-AC/PSD-FL-108F.]

C.10. Particulate Matter. PM/PM_{10} emissions from each sludge dryer RTO train shall not exceed 2.42 lbs/hour and 10.6 tons/year. [BACT Determination and Table AP-1 from Permit No. 0990234-006-AC/PSD-FL-108F.]

C.11. Visible Emission. VE from each sludge dryer RTO train shall not exceed 5% opacity, except 20% opacity is allowed for up to 3 minutes in 1 hour. [BACT Determination and Table AP-1 from Permit No. 0990234-006-AC/PSD-FL-108F.]

C.12. Particulate Matter. PM/PM_{10} emissions from each recycle material bin and pellet storage silo baghouse shall not exceed 0.010 gr/dscf. [BACT Determination and Table AP-1 from Permit No. 0990234-006-AC/PSD-FL-108F.]

C.13. Visible Emission. VE from each recycle material bin and pellet storage silo baghouse shall not exceed 5% opacity. [BACT Determination and Table AP-1 from Permit No. 0990234-006-AC/PSD-FL-108F.]

C.14. Sulfur Dioxide. SO_2 emissions from each sludge dryer RTO train shall not exceed 4.45 lbs/hour and 19.5 tons/year. [Rules 62-212.400(12) (Source Obligation, escape PSD), 62-4.070(1), & (3), F.A.C., and Table AP-1 from Permit No. 0990234-006-AC/PSD-FL-108F.]

C.15. Carbon Monoxide. CO emissions from each sludge dryer RTO train shall not exceed 3.37 lbs/hour and 14.75 tons/year. [Rules 62-212.400(12) (Source Obligation, escape PSD), 62-4.070(1), & (3), F.A.C., and Table AP-1 from Permit No. 0990234-006-AC/PSD-FL-108F.]

C.16. Volatile Organic Compound. VOC emissions from each sludge dryer RTO train shall not exceed 1 lbs/hour and 4.4 tons/year. [Rules 62-212.400(12) (Source Obligation, escape PSD), 62-4.070(1), & (3), F.A.C., and Table AP-1 from Permit No. 0990234-006-AC/PSD-FL-108F.]

C.17. Mercury. Hg emissions from each sludge dryer RTO train shall not exceed 2.2 E-02 lb/24-hour period. {The Hg emissions standard under the NESHAP is 3.2 kg (7.1 lb)/24-hour period. The applicant proposed a limit which is much lower than the NESHAP standard.} [Rules 62-212.400(12) (Source Obligation, escape PSD), 62-4.070(1), & (3), F.A.C., and Table AP-1 from Permit No. 0990234-006-AC/PSD-FL-108F.]

C.18. Unconfined Particulate Matter Emissions at BPF. Pursuant to Rules 62-296.320(4)(c)1., 3. and 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at the BPF include the following requirements consistent with current practices by the Solid Waste Authority:

a. Pave all parking lots and permanent drives;
b. Street sweep paved areas on a regular basis; and,
c. Use a water truck to spray water on unpaved roads and active unpaved areas.

[Rule 62-296.320(4)(c)2., F.A.C. and Permit No. 0990234-006-AC/PSD-FL-108F.]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C., cannot vary any requirement of a NESHAP provision.

C.19. 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.]

C.20. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Monitoring Requirements

C.21. Compliance Assurance Monitoring (CAM) Requirements. Each sludge dryer RTO train is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C. [40 CFR 64; and, Rules 62-204.800 & 62-213.440(1)(b)1.a., F.A.C.]

{Permitting note: The excursion level specified in the approved CAM Plan was established based upon the initial PM test data (September 2009) and the manufacturer's recommendations. The excursion level shall be re-evaluated at the time of permit renewal based upon the new most recent test data and the manufacturer's recommendations.}

Test Methods and Procedures

{Permitting note: Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.22. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
EPA Methods 1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
EPA Method 5	Methods for Determining Particulate Matter (PM) Emissions
EPA Method 6C	Method for Determining Sulfur Dioxide (SO_2) Emissions
EPA Method 7 or 7E	Method for Determining Nitrogen Oxides (NOx) Emissions
EPA Method 9	Visual Determination of the Opacity of Emissions (VE)
EPA Method 10	Method for Determining Carbon Monoxide (CO) Emissions
EPA Method 25 or 25A	Methods for Determining Volatile Organic Compound (VOC) Emissions
EPA Method 101A or EPA Method 105	Method for Determining Particulate and Gaseous Mercury (Hg) Emissions from Sewage Sludge Incinerators or Method for Determining Mercury (Hg) in Wastewater Treatment Plant Sewage Sludge The specific testing and sampling conditions as outlined in 40 CFR 61.53 and 61.54 shall be followed as described.

The above methods are described in Chapter 62-297, F.A.C. and/or 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C. and Permit No. 0990234-006-AC/PSD-FL-108F.]

C.23. Annual Compliance Test. Except as specified in Specific Condition **C.26.**, during each federal fiscal year (October 1st to September 30th), Emissions Unit ID Nos. 010 and 011 (Sludge Dryer Train #1 and #2) and 012 & 014 (Recycle Material Bins & Pellet Storage Silos for Sludge Dryer Train #1 and #2) shall be tested to demonstrate compliance with the emission limitations for VE. Compliance with the visible emissions limit for the recycle bin fabric filter exhaust is determined at the building odor control scrubber exhaust. [Rule 62-297.310(7), F.A.C. and Permit No. 0990234-006-AC/PSD-FL-108F.]

C.24. Compliance Test Prior To Renewal. Prior to permit renewal, Emissions Unit ID Nos. 010 and 011 (Sludge Dryer Train #1 and #2) shall be tested to demonstrate compliance with the emission limitations for NOx, PM/PM_{10}, SO_2, and Hg. [Rule 62-297.310(7)(a)3., F.A.C. and Permit No. 0990234-006-AC/PSD-FL-108F.]

C.25. Compliance Testing - CO and VOC Emissions. The testing frequency for CO and VOC emissions was an initial demonstration only; no subsequent testing is required for CO and VOC because the lb/hour emission rates stated in Table AP-1 were achieved in the initial test. In lieu of frequent testing for CO and VOC emissions, the owner or operator shall follow the Operation and Maintenance Manuals for the dry low NOx burners and the RTOs. [Permit No. 0990234-006-AC/PSD-FL-108F and Rule 62-297.310(7)(a)4., F.A.C.]

C.26. Minor PM Source Testing. The recycle material bins and pellet storage silos are minor sources of particulate matter. Because of the expense and complexity of conducting a stack test on minor sources of particulate matter, and because these sources are equipped with baghouses, the Department pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a visible emission limitation not to exceed an opacity of 5% in lieu of a particulate matter stack test. In accordance with Rule 62-297.620(4), minor particulate matter sources equipped with baghouses with visible emissions that are greater than or equal to 5 percent opacity may result in the permittee being required to perform a stack test in accordance with approved methods to verify compliance with the gr/dscf emission limits. The visible emissions test shall be conducted by a certified observer using Method 9 and the procedures in 40 CFR. 60.11 and Rule 62-297.320, F.A.C. [Rule 62-297.620(1)-(4), F.A.C. and Permit No. 0990234-006-AC/PSD-FL-108F.]

C.27. Common Testing Requirements. Unless otherwise specified above, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

Recordkeeping and Reporting Requirements

C.28. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition
Excess Emissions from Malfunctions, if requested by the Compliance Authority	Every 3 months (quarter)	**C.29.**

[Rule 62-210.700(6), F.A.C.]

C.29. Excess Emissions from Malfunctions. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Compliance Authority. [Rule 62-210.700(6), F.A.C.]

C.30. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

NESHAP 40 CFR 61, Subparts A & E Requirements

C.31. NESHAP 40 CFR 61 Requirements - Subpart A. The dryers shall comply with all applicable requirements of 40 CFR 61, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(10)(d), F.A.C., except for 40 CFR 61.08 and except that the Secretary is not the Administrator for the purposes of 40 CFR 61.04, 40 CFR 61.11, and 40 CFR 61.18. In lieu of the process set forth in 40 CFR 61.08, the Department will follow the permit processing procedures of Rule 62-4.055, F.A.C. The dryers shall comply with all applicable provisions of Appendix 40 CFR 61 Subpart A - General Provisions included with this permit. [Rule 62-204.800(10)(d), F.A.C.]

C.32. NESHAP 40 CFR 61 Requirements - Subpart E. The dryers shall comply with all applicable requirements of 40 CFR 61, Subpart E, National Emission Standards for Hazardous Air Pollutants for Mercury, which have been adopted by reference in Rule 62-204.800(10)(b)3., F.A.C., except that the term "Administrator," when used in any provision of 40 CFR Part 61 that is delegated to the Department by the U.S. Environmental Protection Agency, shall mean the Secretary or the Secretary's designee. The dryers shall comply with all applicable provisions of Appendix 40 CFR 61 Subpart E - NESHAP for Mercury included with this permit. [Rule 62-204.800(10)(a) & (b)3., F.A.C.]

Subsection D. Emissions Units 016, 017, 021, 035 - 043

Engines in this subsection are grouped by similar engine type as regulated by EPA. Each group number is followed by a very brief explanation of the engine type as described in the EPA regulations/tables.

	Group 1: *"Existing" stationary CI RICE less than or equal to 500 HP*	**See Specific Conditions**
E.U. ID No.	**Brief Description**	**D.1. - D.11. & D.87. - D.90.**
035	Emergency Generator - Palm Beach Renewable Energy Park (PBREP) (SWA of PBC ID# WTE-E2)	
036	Fire Water Pump - PBREP (SWA of PBC ID# WTE-E1)	
039	Emergency Generator - Landfill Scalehouse E1 (SWA of PBC ID# LFSC-E1)	
040	Emergency Generator - Landfill Scalehouse E2 (SWA of PBC ID# LFSC-E2)	
041	Emergency Generator - MIS (SWA of PBC ID# MIS-E1)	
	Group 2: *"Existing" stationary CI RICE greater than 500 HP*	**See Specific Conditions**
E.U. ID No.	**Brief Description**	**D.12. - D.13. & D.87. - D.90.**
038	Emergency Generator - Utilities Facility (SWA of PBC ID# U-E5)	
	Group 3: *"Existing" stationary CI RICE greater than 500 HP , Non-Emergency*	**See Specific Conditions**
E.U. ID No.	**Brief Description**	**D.14. - D.38. & D.87. - D.90.**
017	Woody Waste Facility Diesel Engine (primary engine) (SWA of PBC ID# WW)	
	Group 4: *"New" stationary CI RICE greater than or equal to 175 HP and less than or equal to 500 HP*	**See Specific Conditions**
E.U. ID No.	**Brief Description**	**D.39. - D.54. & D.87. - D.90.**
021	Emergency Generator - Operations Building (EPA Tier 3 certified) (SWA of PBC ID# OPS-E1)	
	Group 5: *"New" stationary CI RICE greater than 500 HP*	**See Specific Conditions**
E.U. ID No.	**Brief Description**	**D.55. - D.70. & D.87. - D.90.**
016	Emergency Generator - Biosolids Pelletization Facility (BPF) (EPA Tier 3 certified) (SWA of PBC ID# BPF-E1)	
042	Emergency Generator - Administration (EPA Tier 1 certified)	

	(SWA of PBC ID# A-E1)	
043	Emergency Generator - Materials Recovery Facility (MRF) (EPA Tier 2 certified) (SWA of PBC ID# MRF-E1)	
	Group 6: *"New" stationary CI RICE less than 175 HP*	**See Specific Conditions**
E.U. ID No.	**Brief Description**	**D.71. - D.86. & D.87. - D.90.**
037	Emergency Generator - PBREP Scalehouse (EPA Tier 3 certified) (SWA of PBC ID# WTES-E1)	

This subsection of the permit is comprised of 12 compression ignition (CI) type engines, 11 of which are emergency generators. Air pollutant emissions from these engines are uncontrolled.

{Permitting notes: These emissions units, engines, are regulated under 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) adopted in Rule 62-204.800(11)(b), F.A.C. The permittee identified numerous other non-road engines (portable) located at the facility; these engines are not regulated under 40 CFR 63, Subpart ZZZZ. The "new" engines must meet 40 CFR 60, Subpart IIII, NSPS for Compression Ignition Internal Combustion Engines (CI ICE).}

Each part of this subsection includes unit-specific applicable requirements for each group of engines which were customized from the entire 40 CFR 63, Subpart ZZZZ and/or 40 CFR 60, Subpart IIII.

The specific conditions in this part of the subsection apply to the following group of emissions units:

	Group 1: *"Existing" stationary CI RICE less than or equal to 500 HP*
E.U. ID No.	**Brief Description**
035	Emergency Generator - Palm Beach Renewable Energy Park (PBREP) (SWA of PBC ID# WTE-E2)
036	Fire Water Pump - PBREP (SWA of PBC ID# WTE-E1)
039	Emergency Generator - Landfill Scalehouse E1 (SWA of PBC ID# LFSC-E1)
040	Emergency Generator - Landfill Scalehouse E2 (SWA of PBC ID# LFSC-E2)
041	Emergency Generator - MIS (SWA of PBC ID# MIS-E1)

{Permitting note: This part of the subsection addresses "existing" stationary CI RICE less than or equal to 500 horsepower (HP) that are located at a major source of HAP and that have not been modified or reconstructed after 6/12/2006. Unless the RICE is modified or reconstructed after 7/11/2005, NSPS 40 CFR 60, Subpart IIII, will not apply.}

The following table provides important details for these emissions units:

E.U.	Engine	Date of	Model	Primary	Type of	Displacement	Manufacturer

ID No.	Brake HP	Construction	Year	Fuel	Engine	liters/cylinder (l/c)	Model # / Engine Serial #
035	356	1989	-	Diesel	Emergency	1.73	Caterpillar® 3306 85Z04092
036	273	1994	-	Diesel	Emergency	1.75	Caterpillar® 3306D 6AF15B
039	19	04/01/1997	-	Diesel	Emergency	0.6	Generac® 97A00 N/A
040	63	05/19/2005	-	Diesel	Emergency	0.6	Generac® 5204150200 5030TF270c
041	47	05/01/1997	-	Diesel	Emergency	0.6	Generac® 97A02 N/A

D.1. <numbering preserved>

<u>Essential Potential to Emit (PTE) Parameters</u>

D.2. <u>Hours of Operation</u>.

a. *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]

b. *Maintenance and Testing*. Each RICE is authorized to operate 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. [40 CFR 63.6640(f)(1)]

c. *Non-emergency Situations*. Each RICE is authorized to operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. [40 CFR 63.6640(f)(1)]

d. *Other Situations*. Each RICE cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another

entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power. [40 CFR 63.6640(f)(1)]

e. *Engine Startup*. During periods of startup the owner or operator must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for the appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6625(h)]

Emission Limitations and Operating Requirements

{Permitting note: These "existing" stationary CI engines with ≤ 500 HP do not have specific numerical emission limitations and standards.}

D.3. Work or Management Practice Standards.

a. *Oil*. Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63 Table 2c(1)(a)]

b. *Air Cleaner*. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first. [40 CFR 63 Table 2c(1)(b)]

c. *Hoses and Belts*. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63 Table 2c(1)(c)]

d. *Operation and Maintenance*. Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or develop and follow your own maintenance plan which must provide, to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution, control practice for minimizing emissions. [40 CFR 63.6625(e)]

e. *Oil Analysis*. The owner or operator has the option of using oil analysis to extend the change requirement. The oil analysis must be performed at the same frequency specified for changing the oil. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent of water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent of water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i)]

Monitoring of Operations

D.4. Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

Compliance Requirements

D.5. Continuous Compliance. Each unit shall be in compliance with the emission limitations and operating standards in this section at all times. [40 CFR 63.6605(a)]

D.6. Operation and Maintenance of Equipment. At all times the owner or operator must operate and maintain, any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority which may include, but is not limited to, monitoring results,

review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

Recordkeeping Requirements

D.7. Notification, Performance and Compliance Records.

a. A copy of each notification and report that the owner or operator submitted to comply with this section, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted.
b. The owner or operator must keep the records required in 40 CFR 63.6625(e) of this section to show continuous compliance with each emission limitation or operating requirement.
c. The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

[40 CFR 63.6655]

D.8. Malfunction Records.

a. Records of the occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment.
b. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b) of this section including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 CFR 63.6655]

D.9. Maintenance Records.

a. Records of all required maintenance performed on the air pollution control and monitoring equipment.
b. The owner or operator must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to its own maintenance plan.

[40 CFR 63.6655]

D.10. Record Retention.

a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

Reporting Requirements

D.11. Emergency Situation. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required of this section, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. [40 CFR 63.6602 Table 2c, footnote 1]

The specific conditions in this part of the subsection apply to the following group of emissions units:

	Group 2: ***"Existing" stationary CI RICE greater than 500 HP***

E.U. ID No.	Brief Description
038	Emergency Generator - Utilities Facility (SWA of PBC ID# U-E5)

{Permitting note: This part of the subsection addresses "existing" stationary CI RICE greater than 500 HP that are located at a major source of HAP and that have not been modified or reconstructed after 12/19/2002. Unless the RICE is modified or reconstructed after 7/11/2005, NSPS 40 CFR 60, Subpart IIII, will not apply. This RICE is not used as a fire pump.}

The following table provides important details for this emissions unit:

E.U. ID No.	Engine Brake HP	Date of Construction	Model Year	Primary Fuel	Type of Engine	Displacement liters/cylinder (l/c)	Manufacturer Model # Engine Serial #
038	3,164	5/7/2002	-	Diesel	Emergency	4.3	Caterpillar® 3516B 1HZ02187

Essential Potential to Emit (PTE) Parameters

D.12. Hours of Operation.

a. *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(2)]

b. *Maintenance and Testing*. Each RICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by the manufacturer, the vendor, or the insurance company associated with the engine. Required testing of such units should be minimized, but there is no time limit for routine testing and maintenance. [40 CFR 63.6640(f)(2)]

c. *Non-emergency situations*. Each RICE is authorized to operate for an additional 50 hours per year in non-emergency situations. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)(2)]

d. *Engine Startup*. During periods of startup the owner or operator must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for the appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6625(h)]

Emission Limitations and Operating Requirements

{Permitting note: This "existing" stationary CI engine with > 500 HP does not have a specific numerical emission limitations and standards.}

Recordkeeping Requirements

D.13. Record Retention.

a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.

b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

The specific conditions in this part of the subsection apply to the following group of emissions units:

	Group 3: *"Existing" stationary CI RICE greater than 500 HP , Non-Emergency*
E.U. ID No.	**Brief Description**
017	Woody Waste Facility Diesel Engine (primary engine) (SWA of PBC ID# WW)

{Permitting note: This part of the subsection addresses "existing" stationary CI RICE greater than 500 HP that are located at a major source of HAP and that have been constructed or reconstructed before 12/19/2002. This RICE is not used as a fire pump.}

The following table provides important details for this emissions unit:

E.U. ID No.	Engine Brake HP	Date of Construction	Model Year	Primary Fuel	Type of Engine	Displacement liters/cylinder (l/c)	Manufacturer Model # Engine Serial #
017	1,180	12/10/2001	2001	Diesel	Non-Emergency	2.25	Caterpillar® 3412 BDT00610

Essential Potential to Emit (PTE) Parameters

D.14. <numbering preserved>

D.15. Allowable Fuel. The stationary RICE must use diesel fuel that meets the following requirements for non-road diesel fuel:

a. *Sulfur Content*. The sulfur content shall not exceed 15 ppm (0.0015% by weight) for non-road diesel fuel.

b. *Cetane and Aromatic*. The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

[40 CFR 63.6604 and 40 CFR 80.510(b)]

Emission Standards and Limitations

D.16. Hours of Operation.

a. *Normal Operation*. The stationary RICE may operate continuously (8,760 hours a year) if needed. [40 CFR 63.6640(f)(1)]

b. *Engine Startup*. During periods of startup the owner or operator must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR 63.6625(h)]

D.17. CO Emissions. The owner or operator must reduce carbon monoxide (CO) emissions by 70 percent or more; or limit concentration of CO in the stationary RICE exhaust to 23 parts per million by volume, dry (ppmvd) or less at 15 percent O_2. [40 CFR 63.6600(d) Table 2c]

Operating Limitations

D.18. Operating Limitations. The owner or operator must comply with any operating limitations approved by the Administrator. [40 CFR 63.6603; Table 2b]

Compliance Requirements

D.19. Continuous Compliance. Each unit shall be in compliance with the emission limitations and operating standards in this section at all times. [40 CFR 63.6605(a)]

D.20. Operation and Maintenance of Equipment. At all times the owner or operator must operate and maintain, any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]

D.21. Continuous Compliance - Monitoring and Data. If the owner or operator must comply with emission and operating limitations, they must monitor and collect data according to this section.

a. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), they must monitor continuously at all times that the stationary RICE is operating.
b. The owner or operator may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. They must, however, use all the valid data collected during all other periods.

[40 CFR 63.6635(a)]

D.22. Continuous Compliance. The owner or operator must demonstrate continuous compliance by:

a. Conducting performance tests every 8,760 hours or 3 years, whichever comes first, for CO to demonstrate that the required CO percent reduction is achieved or that emissions remain at or below the CO concentration limit; and,
b. Collecting the approved operating parameter (if any) data according to 40 CFR 63.6625(b); and
c. Reducing these data to 4-hour rolling averages; and,
d. Maintaining the 4-hour rolling averages within the operating limitations for the operating parameters established during the performance test.

[40 CFR 63.6640(a) Table 6 10.i.]

Monitoring, Installation, Collection, Operation and Maintenance Requirements

D.23. CEMS. If the owner or operator elects to install a CEMS as specified in Table 5 of 40 CFR 63, Subpart ZZZZ, they must install, operate, and maintain a CEMS to monitor CO and either oxygen or carbon dioxide (CO_2) at both the inlet and the outlet of the control device according to the requirements in 40 CFR 63.6625(a)(1) through (4). [40 CFR 63.6625(a)]

D.24. Continuous Parameter Monitoring System (CPMS). If the owner or operator is required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of 40 CFR 63, Subpart ZZZZ, they must install, operate, and maintain each CPMS according to the requirements in 40 CFR 63.6625(b)(1) through (8). [40 CFR 63.6625(b)]

D.25. Crankcase Ventilation System. If you own or operate an existing non-emergency, non-black start CI engine greater than or equal to 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either 40 CFR 63.6625(g)(1) or (g)(2):

a. Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere. [40 CFR 63.6625(g)(1)]
b. Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals. [40 CFR 63.6625(g)(2)]

Owners and operators must follow the manufacturer's specified maintenance requirements for operating and maintaining the open or closed crankcase ventilation systems and replacing the crankcase filters, or can

request the Administrator to approve different maintenance requirements that are as protective as manufacturer requirements. [40 CFR 63.6625(g)]

D.26. Temperature Measurement Device. If the owner or operator has an operating limitation that requires the use of a temperature measurement device, they must meet the requirements in 40 CFR 63.6625(k)(1) through (4). [40 CFR 63.6625(k)]

Testing Requirements

D.27. Initial Compliance Testing. The owner or operator has demonstrated initial compliance when:

a. *CO Emissions*.
   (1) The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and,
   (2) The owner or operator has installed a CPMS to continuously monitor operating parameters approved by the Administrator (if any) according to the requirements in 40 CFR 63.6625(b); and,
   (3) The owner or operator has recorded the approved operating parameters (if any) during the initial performance test.

[40 CFR 63.6630 Table 5]

D.28. Testing Frequency. The owner or operator must conduct performance tests every 8,760 hours or 3 years, whichever comes first. [40 CFR 63.6615 Table 3]

D.29. Measurements to Determine O_2 and CO.

a. *Measurements to Determine O_2*. The owner or operator must measure the O_2 at the inlet and outlet of the control device using a portable CO and O_2 analyzer according to the ASTM D6522–00 (2005) (incorporated by reference, see 40 CFR 63.14) requirements. Measurements to determine O_2 must be made at the same time as the measurements for CO concentration. Methods 3A and 10 may also be used as options to ASTM–D6522–00 (2005).
b. *Measurements to Determine CO*. The owner or operator must measure the CO at the inlet and the outlet of the control device using a portable CO and O_2 analyzer according to the ASTM D6522–00 (2005) (incorporated by reference, see 40 CFR 63.14) or Method 10 of 40 CFR appendix A requirements. The CO concentration must be at 15 percent O_2, dry basis. Methods 3A and 10 may also be used as options to ASTM–D6522–00 (2005). Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 may also be used.

[40 CFR 63.6620 Table 4]

Recordkeeping Requirements

D.30. Notification, Performance and Compliance Records.

a. The owner or operator must keep a copy of each notification and report that the owner or operator submitted to comply with this section, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted.
b. The owner or operator must keep the records required in 40 CFR 63.6625(e) of this section to show continuous compliance with each emission limitation or operating requirement.
c. The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.

[40 CFR 63.6655]

D.31. Malfunction Records.

a. The owner or operator must keep records of the occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment.
b. The owner or operator must keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b) of this section including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[40 CFR 63.6655]

D.32. Maintenance Records.

a. The owner or operator must keep records of all required maintenance performed on the air pollution control and monitoring equipment.
b. The owner or operator must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to its own maintenance plan.

[40 CFR 63.6655]

D.33. Performance Records. The owner or operator must keep records of performance tests and performance evaluations as required. [40 CFR 63.6655]

D.34. Record Retention.

a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

Reporting Requirements

D.35. Notification Requirements. The owner or operator must submit all of the notifications in 40CFR 63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified. [40 CFR 63.6645(a)]

D.36. Notification of Intent to Conduct a Performance Test. If the owner or operator is required to conduct a performance test, they must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1). [40 CFR 63.6645(g)]

D.37. Notification of Compliance Status. If the owner or operator is required to conduct a performance test as specified in Tables 4 and 5 of 40 CFR 63, Subpart ZZZZ, they must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii).

a. For each compliance demonstration required in Table 5 of 40 CFR 63, Subpart ZZZZ that does not include a performance test, the owner or operator must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.
b. For each compliance demonstration required in Table 5 of 40 CFR 63, Subpart ZZZZ that includes a performance test conducted according to the requirements in Table 3 of 40 CFR 63, Subpart ZZZZ, the owner or operator must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR 63.10(d)(2).

[40 CFR 63.6645(h)]

D.38. Compliance Report. The owner or operator must submit a Compliance Report. The Report must contain:
a. If there are no deviations from any emission limitations or operating limitations that apply to the owner or operator, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period. If there were no periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or
b. If the owner or operator had a deviation from any emission limitation or operating limitation during the reporting period, the information in 40 CFR 63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), the information in 40 CFR 63.6650(e); or
c. If the owner or operator had a malfunction during the reporting period, the information in 40 CFR 63.6650(c)(4).
The owner or operator must submit the report semiannually according to the requirements in 40 CFR 63.6650(b).
[40 CFR 63.6650 (except 63.6650(g)) Table 7]

The specific conditions in this part of the subsection apply to the following group of emissions units:

	Group 4: *"New" stationary CI RICE greater than or equal to 175 HP and less than or equal to 500 HP*
E.U. ID No.	**Brief Description**
021	Emergency Generator - Operations Building (EPA Tier 3 certified) (SWA of PBC ID# OPS-E1)

{Permitting note: This part of the subsection addresses "new" stationary CI RICE greater than or equal to 175 HP and less than or equal to 500 HP, with a displacement less than 10 liters per cylinder, that are located at a major source of HAP and that have been modified, reconstructed or commenced construction on or after 6/12/2006 and have a 2007 or later model year. This RICE is not used as a fire pump.}

The following table provides important details for this emissions unit:

E.U. ID No.	**Engine Brake HP**	**Date of Construction**	**Model Year**	**Primary Fuel**	**Type of Engine**	**Displacement liters/cylinder (l/c)**	**Manufacturer** **Model #** **Engine Serial #**
021	250	2008	-	Diesel	Emergency	1.115	Cummings/Onan® DSGAB -

Applicability

D.39. Applicability. Pursuant to 40 CFR 63.6590(c), these engines must comply with 40 CFR 63, Subpart ZZZZ by meeting the requirements of NSPS 40 CFR 60, Subpart IIII. 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.; and, 40 CFR 63.6590(c)]

Essential Potential to Emit (PTE) Parameters

D.40. Allowable Fuel. The stationary RICE must use diesel fuel that meets the following requirements for non-road diesel fuel:

c. *Sulfur Content*. The sulfur content shall not exceed 15 ppm (0.0015% by weight) for non-road diesel fuel.

d. *Cetane and Aromatic*. The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b) and 40 CFR 80.510(b)]

D.41. Hours of Operation.

a. *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 60.4211(e)]

b. *Maintenance and Testing.* Each RICE is authorized to operate 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. [40 CFR 60.4211(e)]

c. *Other Situations*. Each RICE cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4219]

Emission Standards and Limitations

D.42. NMHC + NOx Emissions. Non-methane hydrocarbons and nitrogen oxide emissions shall not exceed 4.0 g/KW-hr {equivalent to: 3.2 lbs/hour (OPS-E1)}. [40 CFR 60.4205(b)]

D.43. CO Emissions. Carbon monoxide emissions shall not exceed 3.5 g/KW-hr {equivalent to: 1.4 lbs/hour (OPS-E1)}. [40 CFR 60.4205(b)]

D.44. PM Emissions. Particulate matter emissions shall not exceed 0.2 g/KW-hr {equivalent to: 4.3 lbs/hour (OPS-E1)}. [40 CFR 60.4205(b)]

D.45. Operation and Maintenance. The owner or operator must operate and maintain the stationary CI internal combustion engine 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. The owner or operator must meet the requirements of 40 CFR 89, 94 and/or 1068, as they apply. [40 CFR 60.4211(a)]

Monitoring of Operations

D.46. Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 60.4209(a)]

Compliance Requirements

D.47. Compliance Requirements. Owner or operator must demonstrate compliance according to one of the methods below:

e. *Certification*. Have purchased an engine certified according to 40 CFR 89 or 94, as applicable, for the same model year and maximum engine power.

f. *Manufacturer Data*. Keep records of engine manufacturer data indicating compliance with the standards.

g. *Vendor Data*. Keep records of control device vendor data indicating compliance with the standards.

h. *Performance Test*. Conduct an initial performance test to demonstrate compliance with the emission standards according to the testing requirements in this section.
i. *Similar Engine Tests*. Keep records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

[40 CFR 60.4211(b)]

Testing Requirements

D.48. Performance Test. Performance test must be conducted according to the in-use testing procedures in 40 CFR 1039, Subpart F. [40 CFR 60.4212]

D.49. Engine Manufacturer's Recommendations and Instructions. If the owner/operator does not install, configure, operate, and maintain the engine according to the manufacturer's recommendations and instructions, any required testing shall be completed in accordance with 40 CFR 60, Subpart IIII. [40 CFR 60.4212.]

D.50. Not to exceed (NTE) Standards. Exhaust emissions from stationary CI ICE that are complying with the emission standards must not exceed the not to exceed (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standard, determined from the following equation: NTE = (1.25) x (Standard). [40 CFR 60.4212]

Recordkeeping Requirements

D.51. Required Records. 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 or operator must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214]

D.52. Record Retention.
a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

NSPS 40 CFR 60, Subpart A & IIII Requirements

D.53. NSPS Requirements - Subpart A. These emissions units shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:
40 CFR 60.7, Notification and Recordkeeping
40 CFR 60.8, Performance Tests
40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting Requirements,
which have been adopted by reference in Rule 62-204.800(8)(d), F.A.C.; except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. The applicable 40 CFR 60, Subpart A, General Provisions to which these emissions are subject to are found at 40 CFR 63.4218 and are included in **Appendix 40 CFR 60 Subpart A**. [Rule 62-204.800(8)(d), F.A.C.]

D.54. 40 CFR 60 Requirements - Subpart IIII [Generally Applicable Requirements]. These emissions units shall comply with all applicable requirements of 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, which have been adopted by reference in Rule 62-204.800(8), F.A.C. These emissions units shall comply with **Appendix 40 CFR 60 Subpart IIII**

"Generally Applicable Requirements," included with this permit, which includes applicable requirements that apply in general to all engines regulated under 40 CFR 60, Subpart IIII. This appendix also contains useful information like definitions (see 40 CFR 60.4219) that are specific to engines regulated under 40 CFR 60 Subpart IIII. [Rule 62-204.800(8), F.A.C.]

The specific conditions in this part of the subsection apply to the following group of emissions units:

	Group 5: *"New" stationary CI RICE greater than 500 HP*
E.U. ID No.	**Brief Description**
016	Emergency Generator - Biosolids Pelletization Facility (BPF) (EPA Tier 3 certified) (SWA of PBC ID# BPF-E1)
042	Emergency Generator - Administration (EPA Tier 1 certified) (SWA of PBC ID# A-E1)
043	Emergency Generator - Materials Recovery Facility (MRF) (EPA Tier 2 certified) (SWA of PBC ID# MRF-E1)

{Permitting note: This part of the subsection addresses "new" stationary CI RICE greater than 500 HP, with a displacement less than 10 liters per cylinder, that are located at a major source of HAP and that have been modified, reconstructed or commenced construction on or after 12/19/2002 and have a pre-2007 or 2007 & later model year. These RICE are not used as fire pumps.}

The following table provides important details for these emissions units:

E.U. ID No.	Engine Brake HP	Date of Construction	Model Year	Primary Fuel	Type of Engine	Displacement liters/cylinder (l/c)	Manufacturer Model # Engine Serial #
016	550	2009	2007	Diesel	Emergency	2.33	Kohler® 350REOZDD 2180993
042	913	5/2/2006	2001	Diesel	Emergency	2.25	Caterpillar® 3412 BPG00204
043	775	2009	-	Diesel	Emergency	2.48	Cummings/Onan® DFEG 60 Hz -

Applicability

D.55. Applicability. Pursuant to 40 CFR 63.6590(c), these engines must comply with 40 CFR 63, Subpart ZZZZ by meeting the requirements of NSPS 40 CFR 60, Subpart IIII. 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.; and, 40 CFR 63.6590(c)]

Essential Potential to Emit (PTE) Parameters

D.56. Allowable Fuel. The stationary RICE must use diesel fuel that meets the following requirements for non-road diesel fuel:

a. *Sulfur Content*. The sulfur content shall not exceed 15 ppm (0.0015% by weight) for non-road diesel fuel.

b. *Cetane and Aromatic*. The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b) and 40 CFR 80.510(b)]

D.57. Hours of Operation.

a. *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 60.4211(e)]

b. *Maintenance and Testing.* Each RICE is authorized to operate 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. [40 CFR 60.4211(e)]

c. *Other Situations*. Each RICE cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 60.4219]

Emission Standards and Limitations

D.58. The following emission standards and limitations apply to E.U. ID No. 016, Emergency Generator - Biosolids Pelletization Facility (BPF) (EPA Tier 3 certified):

a. NMHC + NOx Emissions. Non-methane hydrocarbons and nitrogen oxide emissions shall not exceed 4.0 g/KW-hr {equivalent to: 3.62 lbs/hour}. [40 CFR 60.4205(b)]

b. CO Emissions. Carbon monoxide emissions shall not exceed 3.5 g/KW-hr {equivalent to: 3.17 lbs/hour}. [40 CFR 60.4205(b)]

c. PM emissions. Particulate matter emissions shall not exceed 0.2 g/KW-hr{equivalent to: 0.18 lbs/hour}. [40 CFR 60.4205(b)]

D.59. The following emission standards and limitations apply to E.U. ID No. 042, Emergency Generator - Administration (EPA Tier 1 certified):

a. HC Emissions. Hydrocarbon emissions shall not exceed 1.3 g/KW-hr or 1.0 g/HP-hr {equivalent to: 1.9 lbs/hour}. [40 CFR 60.4205(a)]

b. NOx Emissions. Nitrogen oxide emissions shall not exceed 9.2 g/KW-hr or 6.9 g/HP-hr {equivalent to: 13.8 lbs/hour}. [40 CFR 60.4205(a)]

c. CO Emissions. Carbon monoxide emissions shall not exceed 11.4 g/KW-hr or 8.5 g/HP-hr {equivalent to: 17.1 lbs/hour}. [40 CFR 60.4205(a)]

d. PM emissions. Particulate matter emissions shall not exceed 0.54 g/KW-hr or 0.40 g/HP-hr {equivalent to: 0.8 lbs/hour}. [40 CFR 60.4205(a)]

D.60. The following emission standards and limitations apply to E.U. ID No. 043, Emergency Generator - Materials Recovery Facility (MRF) (EPA Tier 2 certified):

a. NMHC + NOx Emissions. Non-methane hydrocarbons and nitrogen oxide emissions shall not exceed 6.4 g/KW-hr {equivalent to: 7.95 lbs/hour}. [40 CFR 60.4205(b)]

b. CO Emissions. Carbon monoxide emissions shall not exceed 3.5 g/KW-hr {equivalent to: 4.35 lbs/hour}. [40 CFR 60.4205(b)]

c. PM emissions. Particulate matter emissions shall not exceed 0.2 g/KW-hr {equivalent to: 0.25 lbs/hour}. [40 CFR 60.4205(b)]

D.61. Operation and Maintenance. The owner or operator must operate and maintain the stationary CI internal combustion engine 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. The owner or operator must meet the requirements of 40 CFR 89, 94 and/or 1068, as they apply. [40 CFR 60.4211(a)]

Monitoring of Operations

D.62. Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 60.4209(a)]

Compliance Requirements

D.63. Compliance Requirements. Owner or operator must demonstrate compliance according to one of the methods below:

a. *Certification*. Have purchased an engine certified according to 40 CFR 89 or 94, as applicable, for the same model year and maximum engine power.
b. *Manufacturer Data*. Keep records of engine manufacturer data indicating compliance with the standards.
c. *Vendor Data*. Keep records of control device vendor data indicating compliance with the standards.
d. *Performance Test*. Conduct an initial performance test to demonstrate compliance with the emission standards according to the testing requirements in this section.
e. *Similar Engine Tests*. Keep records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

[40 CFR 60.4211(b)]

Testing Requirements

D.64. Performance Test. Performance test must be conducted according to the in-use testing procedures in 40 CFR 1039, Subpart F. [40 CFR 60.4212]

D.65. Engine Manufacturer's Recommendations and Instructions. If the owner/operator does not install, configure, operate, and maintain the engine according to the manufacturer's recommendations and instructions, any required testing shall be completed in accordance with 40 CFR 60, Subpart IIII. [40 CFR 60.4212.]

D.66. Not to exceed (NTE) Standards. Exhaust emissions from stationary CI ICE that are complying with the emission standards must not exceed the not to exceed (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standard, determined from the following equation: NTE = (1.25) x (Standard). [40 CFR 60.4212]

Recordkeeping Requirements

D.67. Required Records. 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 or operator must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214]

D.68. Record Retention.

a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

NSPS 40 CFR 60, Subpart A & IIII Requirements

D.69. NSPS Requirements - Subpart A. These emissions units shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:

40 CFR 60.7, Notification and Recordkeeping
40 CFR 60.8, Performance Tests

40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting Requirements,
which have been adopted by reference in Rule 62-204.800(8)(d), F.A.C.; except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. The applicable 40 CFR 60, Subpart A, General Provisions to which these emissions are subject to are found at 40 CFR 63.4218 and are included in **Appendix 40 CFR 60 Subpart A**. [Rule 62-204.800(8)(d), F.A.C.]

D.70. 40 CFR 60 Requirements - Subpart IIII [Generally Applicable Requirements]. These emissions units shall comply with all applicable requirements of 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, which have been adopted by reference in Rule 62-204.800(8), F.A.C. These emissions units shall comply with **Appendix 40 CFR 60 Subpart IIII "Generally Applicable Requirements,"** included with this permit, which includes applicable requirements that apply in general to all engines regulated under 40 CFR 60, Subpart IIII. This appendix also contains useful information like definitions (see 40 CFR 60.4219) that are specific to engines regulated under 40 CFR 60 Subpart IIII. [Rule 62-204.800(8), F.A.C.]

The specific conditions in this part of the subsection apply to the following group of emissions units:

	Group 6: *"New" stationary CI RICE less than 175 HP*
E.U. ID No.	**Brief Description**
037	Emergency Generator - PBREP Scalehouse (EPA Tier 3 certified) (SWA of PBC ID# WTES-E1)

{Permitting note: This part of the subsection addresses "new" stationary CI RICE less than 175 HP, with a displacement less than 10 liters per cylinder, that are located at a major source of HAP and that have been modified, reconstructed or commenced construction on or after 6/12/2006 and have a 2007 or later model year. This RICE is not used as a fire pump.}

The following table provides important details for this emissions unit:

E.U. ID No.	Engine Brake HP	Date of Construction	Model Year	Primary Fuel	Type of Engine	Displacement liters/cylinder (l/c)	Manufacturer Model # Engine Serial #
037	88.5	-[1]	-	Diesel	Emergency	1.1 (est.)	Caterpillar® D60-8S -

[1] Compliance Plan. This unit was in the process of being purchased at the time the permit revision application had been submitted. The permittee shall notify the compliance office of the date when the unit was placed in service and when the readiness testing was completed. [Rule 62-213.440(2), F.A.C.; and, Permit No. 0990234-029-AC.]

Applicability

D.71. Applicability. Pursuant to 40 CFR 63.6590(c), these engines must comply with 40 CFR 63, Subpart ZZZZ by meeting the requirements of NSPS 40 CFR 60, Subpart IIII. 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.; and, 40 CFR 63.6590(c)]

Essential Potential to Emit (PTE) Parameters

D.72. Allowable Fuel. The stationary RICE must use diesel fuel that meets the following requirements for non-road diesel fuel:

a. *Sulfur Content*. The sulfur content shall not exceed 15 ppm (0.0015% by weight) for non-road diesel fuel. {equivalent to: 0.0006 lb SO_2/hour}

b. *Cetane and Aromatic*. The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b) and 40 CFR 80.510(b)]

D.73. Hours of Operation.

a. *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 60.4211(f)(1)]

b. *Maintenance and Testing.* Each RICE is authorized to operate 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. [40 CFR 60.4211(f)(2)]

c. *Other Situations*. Each RICE cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. Each RICE may be operated for up to 50 hours per calendar year in non-emergency situations. [40 CFR 60.4211(f)(3)]

Emission Standards and Limitations

D.74. NMHC + NOx Emissions. Non-methane hydrocarbons and nitrogen oxide emissions shall not exceed 4.7 g/KW-hr {equivalent to: 0.22 + 0.68 lb/hour}. [40 CFR 60.4205(b)]

D.75. CO Emissions. Carbon monoxide emissions shall not exceed 5.0 g/KW-hr {equivalent to: 0.73 lb/hour}. [40 CFR 60.4205(b)]

D.76. PM Emissions. Particulate matter emissions shall not exceed 0.40 g/KW-hr {equivalent to: 0.06 lb/hour}. [40 CFR 60.4205(b)]

D.77. Operation and Maintenance. The owner or operator must operate and maintain the stationary CI internal combustion engine 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. The owner or operator must meet the requirements of 40 CFR 89, 94 and/or 1068, as they apply. [40 CFR 60.4211(a)]

Monitoring of Operations

D.78. Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 60.4209(a)]

Compliance Requirements

D.79. Compliance Requirements. Owner or operator must demonstrate compliance according to one of the methods below:

a. *Certification*. Have purchased an engine certified according to 40 CFR 89 or 94, as applicable, for the same model year and maximum engine power.

b. *Manufacturer Data*. Keep records of engine manufacturer data indicating compliance with the standards.

c. *Vendor Data*. Keep records of control device vendor data indicating compliance with the standards.

d. *Performance Test*. Conduct an initial performance test to demonstrate compliance with the emission standards according to the testing requirements in this section.

e. *Similar Engine Tests*. Keep records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.

[40 CFR 60.4211(b)]

Testing Requirements

D.80. Performance Tests. Any performance tests conducted pursuant to 40 CFR 60, Subpart IIII must be according to the in-use testing procedures in 40 CFR 1039, Subpart F. [40 CFR 60.4212]

D.81. Engine Manufacturer's Recommendations and Instructions. If the owner/operator does not install, configure, operate, and maintain the engine according to the manufacturer's recommendations and instructions, any required testing shall be completed in accordance with 40 CFR 60, Subpart IIII. [40 CFR 60.4212.]

D.82. Not to exceed (NTE) Standards. Exhaust emissions from stationary CI ICE that are complying with the emission standards must not exceed the not to exceed (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standard, determined from the following equation: NTE = (1.25) x (Standard). [40 CFR 60.4212]

Recordkeeping Requirements

D.83. Required Records. 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 or operator must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214]

D.84. Record Retention.

a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

NSPS 40 CFR 60, Subpart A & IIII Requirements

D.85. NSPS Requirements - Subpart A. These emissions units shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:

40 CFR 60.7, Notification and Recordkeeping
40 CFR 60.8, Performance Tests
40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting Requirements,

which have been adopted by reference in Rule 62-204.800(8)(d), F.A.C.; except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. The applicable 40 CFR 60, Subpart A, General Provisions to which these emissions are subject to are found at 40 CFR 63.4218 and are included in **Appendix 40 CFR 60 Subpart A**. [Rule 62-204.800(8)(d), F.A.C.]

D.86. 40 CFR 60 Requirements - Subpart IIII [Generally Applicable Requirements]. These emissions units shall comply with all applicable requirements of 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, which have been adopted by reference in Rule 62-204.800(8), F.A.C. These emissions units shall comply with **Appendix 40 CFR 60 Subpart IIII "Generally Applicable Requirements,"** included with this permit, which includes applicable requirements that apply in general to all engines regulated under 40 CFR 60, Subpart IIII. This appendix also contains

useful information like definitions (see 40 CFR 60.4219) that are specific to engines regulated under 40 CFR 60 Subpart IIII. [Rule 62-204.800(8), F.A.C.]

THE FOLLOWING SPECIFIC CONDITIONS APPLY TO ALL GROUPS OF EMISSIONS UNITS.

Operation and Maintenance Requirements

{Permitting note: TABLE E-1. SUMMARY OF MAINTENANCE REQUIREMENTS FOR ENGINES, summarizes maintenance requirements under 40 CFR 63, Subpart ZZZZ for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Test Methods and Procedures

D.87. Common Testing Requirements. Any tests, if required, shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

Recordkeeping and Reporting Requirements

D.88. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

NESHAP 40 CFR 63, Subpart A & ZZZZ Requirements

D.89. 40 CFR 63 Requirements - Subpart A. These emissions units shall comply with all applicable requirements of 40 CFR 63, Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. The applicable 40 CFR 63, Subpart A, General Provisions to which these emissions are subject to are found at 40 CFR 63.6665 and are included in **Appendix 40 CFR 63 Subpart A**. [Rule 62-204.800(11)(d)1., F.A.C.]

D.90. 40 CFR 63 Requirements - Subpart ZZZZ [Generally Applicable Requirements]. These emissions units shall comply with all applicable requirements of 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), which have been adopted by reference in Rule 62-204.800(11)(b), F.A.C. These emissions units shall comply with **Appendix 40 CFR 63 Subpart ZZZZ "Generally Applicable Requirements,"** included with this permit, which includes applicable requirements that apply in general to all engines regulated under 40 CFR 63 Subpart ZZZZ. This appendix also contains useful information like provisions that are not delegated to state or local agencies (see 40 CFR 63.6670) and contains definitions (see 40 CFR 63.6675) that are specific to engines regulated under 40 CFR 63 Subpart ZZZZ. [Rule 62-204.800(11)(b), F.A.C.]

SECTION IV. APPENDICES.

The Following Appendices are Enforceable Parts of This Permit:

Appendix A, Glossary.
Appendix ATP, U.S. EPA Alternative Test Procedure Approval dated June 3, 2004.
Appendix BW, Biomedical Waste Definitions.
Appendix CAM, Compliance Assurance Monitoring Plan.
Appendix HGV, DEP Order Granting Variance for Mercury Testing dated August 25, 1997.
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.
Appendix U, List of Unregulated Emissions Units and/or Activities.

Appendix 40 CFR 60 Subpart A, NSPS General Provisions (version dated 2/5/2010).
Appendix 40 CFR 60 Subpart Cb, Emissions Guidelines (EG) and Compliance Times for Large Municipal Waste Combustors (version dated 03/24/2010).
Appendix 40 CFR 60 Subpart Eb, NSPS for Large Municipal Waste Combustors (version dated 04/21/2008).
Appendix 40 CFR 60 Subpart IIII "Generally Applicable Requirements," Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (version dated 07/11/2006).
Appendix 40 CFR 60 Subpart WWW, NSPS for Municipal Solid Waste Landfills (version dated 08/06/2009).
Appendix 40 CFR 61 Subpart A, NESHAP General Provisions (version dated 05/06/2004).
Appendix 40 CFR 61 Subpart E, NESHAP for Mercury (version dated 03/20/03).
Appendix 40 CFR 61 Subpart M "Set A," NESHAP for Asbestos (version dated 08/19/2004).
Appendix 40 CFR 63 Subpart A, NESHAP General Provisions (version dated 01/29/2008).
Appendix 40 CFR 63 Subpart AAAA, NESHAP for Municipal Solid Waste Landfills (version dated 08/06/2009).
Appendix 40 CFR 63 Subpart ZZZZ "Generally Applicable Requirements," National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (version dated 06/30/2010)