Lee County Department of Solid Waste Management

Lee County Resource Recovery Facility

Facility ID No. 0710119
Lee County

Title V Air Operation Permit Renewal

Permit No. 0710119-013-AV

(Renewal of Title V Air Operation Permit No. 0710119-007-AV)

Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Office of Permitting and Compliance
2600 Blair Stone Road

Mail Station #5505
Tallahassee, Florida 32399-2400

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Compliance Authority:

State of Florida
Department of Environmental Protection
South District Office

2295 Victoria Avenue, Suite 364
Fort Myers, Florida 33902-2549

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Title V Air Operation Permit Renewal

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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 61 Subpart A, NESHAP General Provisions (version dated 05/06/2004).
Appendix 40 CFR 61 Subpart E, NESHAP for Mercury (version dated 03/20/2003).

Appendix 40 CFR 63 Subpart A, NESHAP General Provisions.
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U.S. EPA e-mail dated January 22, 2009 regarding Testing Schedule for Fugitive Ash and HCl Emissions.

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PERMITTEE:
Lee County Department of Solid Waste Management
7501 North Jog Road
West Palm Beach, FL 33412

Permit No. 0710119-013-AV
Lee County Resource Recovery Facility
Facility ID No. 0710119
Project: Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. This existing facility is located in Lee County at 10500 Buckingham Road, Fort Myers, Florida; UTM Coordinates are: Zone 17, 424.21 km East and 2945.70 km North. Latitude is: 26° 37' 54" North; and, Longitude is: 81° 45' 41" 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.

Effective Date: December 20, 2016
Renewal Application Due Date: May 9, 2021
Expiration Date: December 20, 2021

David Lyle Read, P.E.

David Lyle Read, P.E.
2016.12.20 12:25:57 -05'00'

For:

Syed Arif, P.E., Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

SA/dlr/sms

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

The Lee County Resource Recovery Facility consists of: three municipal solid waste combustors (Unit Nos. 1, 2 and 3) with auxiliary burners; ash storage and processing facilities; a metals recovery system; cooling towers; and, ancillary support equipment. The total capacity of the Lee County Resource Recovery Facility is 1,980 tons/day (TPD) of municipal solid waste fuel with a nominal higher heating value (HHV) of 5,000 Btu/lb. The gross nominal electric generating capacity of the facility is 60 megawatts (MW). The facility is owned by Lee County and is currently operated by Covanta Lee, Inc.

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	
	Municipal Waste Combustors & Auxiliary Burners
001	Municipal Waste Combustor Unit 1
002	Municipal Waste Combustor Unit 2
006	Municipal Waste Combustor Unit 3
004	Ash Handling System
	Engines
008	Diesel Emergency Generator - 330 horsepower (HP)
009	Fire Pump No. 1 - 305 HP
010	Fire Pump No. 2 - 300 HP
011	Fire Pump No. 3 - 64 HP (Waste-to-Energy (WTE) Transfer Station)
Unregulated Emissions Units and/or Activities	
005	Cooling Towers

Subsection C. Applicable Requirements.

Based on the Title V air operation permit renewal application received on June 14, 2016, 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).
Municipal Waste Combustors	
40 CFR 60, Subpart A, Standards of Performance for New Stationary Sources (NSPS) General Provisions	001, 002 & 006
40 CFR 60, Subpart Cb, Emissions Guidelines (EG) and Compliance Times for Large Municipal Waste Combustors {Rule 62-204.800(9)(b), F.A.C. implements 40 CFR 60, Subpart Cb}	001, 002 & 004 (ash conveying systems)

{Permitting note(s): The EG 40 CFR 60, Subpart Cb, cross references applicable requirements that are contained in the NSPS 40 CFR 60, Subparts A and Eb.}	
40 CFR 60, Subpart Eb, Standards of Performance for Large Municipal Waste Combustors	006
40 CFR 61 Subpart A, NESHAP General Provisions	001, 002 & 006
40 CFR 61 Subpart E, NESHAP for Mercury	001, 002 & 006
Rule 62-296.416, F.A.C., Waste-to-Energy Facilities	001, 002 & 006
Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD)	001, 002, 004 & 006
Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT)	001, 002 & 006
Engines	
40 CFR 60, Subpart A, Standards of Performance for New Stationary Sources (NSPS) General Provisions	009 & 010
40 CFR 60, Subpart IIII, NSPS for Compression Ignition Internal Combustion Engines (CI-ICE)	009 & 010
40 CFR 63, Subpart A, General Provisions	008 - 011
40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE)	008 - 011
Unregulated Emissions Units and/or Activities	
Rule 62-210.300, F.A.C., Permits Required	005

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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. Odor Control. No objectionable odors are allowed from this facility. The truck access doors to the unit shall remain closed except during normal working shifts when municipal solid waste (MSW) is being received at the storage pit area. To minimize odors at the unit, a negative pressure shall be maintained on the tipping floor and air from within the building will be used as combustion air. [Permit Nos. PSD-FL-151D/0710119-005-AC, Condition III.D.2. & PSD-FL-151, Condition 4.c. and Rule 62-296.320(2), F.A.C.]

FW4. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1)(a), F.A.C.]

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

FW5. 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.]

FW6. 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. All roads shall be adequately paved and vacuum swept, if appropriate, to keep free from visible dust.
b. Speed limit signs shall be posted.
c. Residue from the grates, grate siftings, and ash from the combustor/boiler and fabric filter hoppers during normal operations shall be discharged into the ash quenching system as to minimize visible dust.
d. The ash/residue in the ash handling building shall remain sufficiently moist to prevent dust during storage and handling operations.

[Rule 62-296.320(4)(c), F.A.C.; PSD-FL-151, Condition 4.g.; and, proposed by applicant in the Title V air operation permit renewal application received on June 14, 2016.]

FW7. Facility Fugitive (Unconfined) Emissions. Fugitive emissions at this facility shall be adequately controlled at all times. All roads shall be adequately paved, and vacuum swept if appropriate, to minimize accumulations of ash and dust. Unprocessed refuse storage areas which must be open for operational purposes (e.g., tipping floor or the refuse bunker while trucks are entering and leaving) shall be under negative air pressure. [Permit No. PSD-FL-151D/0710119-005-AC and Rule 62-296.320(4)(c), F.A.C.]

Annual Reports and Fees

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

FW8. Electronic Annual Operating Report (EAOR) and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1st of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP's Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of Rule 62-210.370(2), F.A.C. Each Title V source must pay between January 15th and April 1st of each year an annual emissions fee in an amount determined as set forth in Rule 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida. 32315-3070**. Additional information is available 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/emission/tvfee.htm. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, Section 403.0872(11), Florida Statutes (2013)]

{Permitting notes:

If the permittee chooses to use the EAOR software, instructions provided with the system should be followed.

Resources to help complete the AOR are available on the website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.

Also, the Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) was repealed; a separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.}

FW9. 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 and to the U.S. EPA at the address shown below within 60 days after the end of each calendar year during which the Title V air operation permit was effective. (See also Appendix RR, Conditions RR1 and RR7.) [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303
Attn: Air Enforcement Branch

{Permitting note: As specified in Specific Condition RR7 of Appendix RR, the permittee shall use DEP Form No. 62-213.900(7) to comply with this requirement.}

FW10. Prevention of Accidental Releases (Section 112(r) of CAA).

a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. (See paragraph e., below.)

b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Division of Emergency Management, as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if

the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.

c. The owner or operator shall submit the required annual registration fee to the Division of Emergency Management on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 27P-21, F.A.C.
d. Any required written reports, notifications, certifications, and data required to be sent to the Division of Emergency Management, should be sent to: Division of Emergency Management, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2100, Telephone: (850) 413-9970, Fax: (850) 488-1739.
e. Any Risk Management Plans, original submittals, revisions, or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: https://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: http://www2.epa.gov/rmp. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.
f. Any required reports to be sent to the National Response Center, should be sent to: National Response Center, EPA Office of Solid Waste and Emergency Response, 1200 Pennsylvania Avenue Northwest, Mail Code: USEPA (5101T), Washington, DC 20460, Telephone: (800) 424-8802.
g. Send the required annual registration fee using approved forms made payable to: Cashier, Division of Emergency Management, State Emergency Response Commission, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S.; and, Rule 27P-21, F.A.C.]

Authorization to Combust Biosolids

{Permitting note: Permit No. 0710119-009-AC/PSD-FL-151F authorized the combustion of biosolids that are not liquid biosolids in municipal solid waste combustor Unit Nos. 1, 2 and 3 as an allowable non-MSW fuel received as a segregated material.

"Biosolids" (treated sewage sludge) are formerly known as "domestic wastewater residuals" in the Department's domestic wastewater treatment rule, Chapter 62-640, F.A.C.

Biosolids from the domestic wastewater treatment plants in the Lee County municipal area are planned to be combusted in municipal solid waste combustor Unit Nos. 1, 2 and 3.}

FW11. Authorization to Combust Biosolids - Quantity. The LCRRF is authorized to combust biosolids in the amount of up to 5% of the municipal solid waste combustor Unit Nos. 1, 2 and 3 loading rates on an as received (i.e., wet) basis not to exceed 99 TPD facility-wide, averaged monthly. [Permit No. 0710119-009-AC/PSD-FL-151F.]

FW12. Biosolids Operation Practices. To ensure good mixing with MSW, operators shall use best management practices when firing biosolids as defined in the plant's Biosolids Training Plan. [Permit No. 0710119-009-AC/PSD-FL-151F.]

FW13. Biosolids Training Plan. The owner or operator developed a training plan that defined the best management practices in handling, storage and combustion of biosolids in the municipal solid waste combustor Unit Nos. 1, 2 and 3. Operators shall be trained in accordance with this plan prior to the handling, storing, and combusting biosolids.

The training plan shall continue to identify the practices that promote good mixing and combustion, such as:

The operator will spread biosolids with the crane grapple over the top of MSW in the waste storage bunker. Other MSW may be spread over the top of the biosolids. All mixing will take place in the waste storage bunker. Biosolids will not be placed on the tipping floor, or alone, in a waste storage bunker. Well-mixed (combined) materials will be fed directly into the combustor feed hopper. Alternately, mixing may occur on the tipping floor using a wheeled front-end loader if it is determined that such mixing of biosolids with MSW can be performed more effectively than using the crane grapple. In such

case, the mixed MSW and biosolids will then be placed in the waste storage bunker along with other MSW.

To the extent practicable, biosolids shall not come in contact with delivery truck tires or front-end loader wheels.

As the plant gains experience with the handling and storing of biosolids, the Biosolids Training Plan shall be updated to reflect current best management practices. Updates to the Biosolids Training Plan will supersede any contradictory language contained in this permit specific condition only regarding the handling and storing of biosolids at the facility. Updates related to the combusting of biosolids shall be approved by the Department before implementation.

The training plan shall be kept on site and made available for inspection upon request.

[Permit No. 0710119-009-AC/PSD-FL-151F.]

FW14. Biosolids Recordkeeping. For each month when biosolids are combusted, the owner or operator shall keep a record of the following on-site:

a. the source of the biosolids;
b. the classification type of biosolids, e.g., Class A, B or AA; and,
c. the analytical results from the source of the biosolids showing: the metal constituents; % solids by weight, and pathogen results.

{Permitting note: Sources of biosolids perform analyses under Chapter 640, F.A.C.}
[Permit No. 0710119-009-AC/PSD-FL-151F.]

FW15. Records of Quantities of Biosolids Combusted. The permittee shall keep records on-site of the total quantity of biosolids combusted in the MWC units. [Permit No. 0710119-009-AC/PSD-FL-151F.]

NESHAP 40 CFR 61, Subparts A & E Requirements

FW16. NESHAP 40 CFR 61 Requirements - Subpart A. The MWCs when combusting biosolids 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 MWCs when combusting biosolids shall comply with all applicable provisions of Appendix C. 40 CFR 61 Subpart A - General Provisions included with this permit. [Rule 62-204.800(10)(d), F.A.C.]

FW17. NESHAP 40 CFR 61 Requirements - Subpart E. The MWCs when combusting biosolids 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 MWCs when combusting biosolids shall comply with all applicable provisions of Appendix D. 40 CFR 61 Subpart E - NESHAP for Mercury included with this permit. [Rule 62-204.800(10)(a) & (b)3., F.A.C.]

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Subsection A. Emission Units 001 & 002
Municipal Waste Combustor Units 1 & 2

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

E.U. ID No.	Brief Description
001	Municipal Waste Combustor Unit 1
002	Municipal Waste Combustor Unit 2

Emissions Unit ID Nos. 001 and 002 are Distral Termica manufactured municipal solid waste (MSW) combustors designated as "Unit 1" and "Unit 2," respectively. The units are identical in configuration. The serial numbers are A2900 and A2901. Each unit consists of a mass burn water wall boiler with two auxiliary natural gas/propane fired burners. The combustion system incorporates the technology of German-based Martin GmbH. Waste is combusted at furnace temperatures exceeding 1,800 degrees Fahrenheit, and reduced to an inert ash residue. The burners are used to fire the MSW combustors during startup, shutdown, and at other times when necessary and consistent with good combustion practices.

Each municipal waste combustor (MWC) has a nominal design rated capacity of 660 tons MSW per day and 186,200 lbs/hour steam production with MSW having a heating value of 5,000 Btu/lb. Short term capacity is restricted by limiting steam production to 186,200 lbs/hour, which effectively limits heat input. The net design steam enthalpy for useful work is 1,158 Btu/lb. These units produce up to 40 MW of electricity daily.

Odor is controlled by drawing combustion air from the refuse tipping floor area. Spray dry absorbers and baghouses are used for the control of acid gases and particulate matter, selective non-catalytic reduction (SNCR) systems for the control of nitrogen oxides (NOx), and activated carbon injection (ACI) systems for the control of mercury (Hg) and certain organic emissions. Activated carbon is injected into the flue gases prior to the baghouses to control Hg emissions. Captured dry ash particles fall into hoppers and are transported by an enclosed conveyor system to the bottom ash discharger where they are wetted to prevent dust, and mixed with the bottom ash.

All three units, Units 1, 2 and 3 (see Subsection III.B.), exhaust to a common stack consisting of three separate flues. The stack parameters for each flue are: height, 275 feet; diameter, 6.2 feet; exit temperature, 270 degrees F; and, actual stack gas flow rate, 116,943 acfm.

Unit 1 began commercial operation on August 20, 1994, while Unit 2 began commercial operation on August 27, 1994.

{Permitting note(s): These emissions units are regulated under Rule 62-204.800(9)(b), F.A.C. which implements 40 CFR 60, Subpart Cb, Emissions Guidelines (EG) and Compliance Times for Large Municipal Waste Combustors; 40 CFR 61 Subpart E, NESHAP for Mercury (when combusting biosolids); 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-151, as amended]; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); and, Florida Electrical Power Plant Site Certifications [PA90-30].}

{Permitting note(s): 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.}

Equipment and Operational Limitations

A.1. Name Plate. The combustor boilers shall have a metal name plate affixed in a conspicuous place on the shell showing the manufacturer, model number, type of waste, and rated capacity. [Rule 62-4.160(2), F.A.C.; and, PSD-FL-151.]

A.2. Boiler Stack Height. The height of the boiler exhaust stack shall not be less than 275 feet above grade or the height determined to be good engineering practice. [Rule 62-4.160(2), F.A.C.; and, PSD-FL-151.]

Essential Potential to Emit (PTE) Parameters

A.3. 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, PSD-FL-151.]

A.4. Capacity. The following maximum values (capacities) based on a heating value of 5,000 Btu/lb of MSW shall not be exceeded:
a. 660 tons/day (TPD) individual MWC unit throughput of MSW;
b. 275 MMBtu/hr individual MWC unit heat input; and,
c. 186,200 lbs/hr individual MWC unit steam production on a 4-hour block arithmetic average.
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. [Rule 62-4.160(2) & 62-210.200 (PTE), F.A.C.; 40 CFR 60.31b & 40 CFR 60.58b(j); and, PSD-FL-151, Condition 4.i.]

A.5. 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(3)(b), F.A.C.; and, 40 CFR 60.34b(b) & 40 CFR 60.51b.]

A.6. MWCs - Methods of Operation - Fuels.
a. *Allowable Fuels.*
(1) The only fuels allowed to be burned in the MWCs are municipal solid waste (MSW), with natural gas/propane as an auxiliary fuel. Other fuels or wastes, not specifically listed herein, shall not be burned without written prior approval from the Department. Lee County shall minimize emissions of mercury through a battery collection program.[1] Fuels or wastes specifically authorized herein do not require prior Department approval before combustion.
(2) The primary fuel for the facility is MSW, 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) explosives;
(h) 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) nickel-cadmium batteries pursuant to Section 403.7192(3), F.S. [1];
(d) mercury containing devices and lamps pursuant to Sections 403.7186(2) & (3) , F.S. [1]
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 either:

(1) well mixed with MSW on the tipping floor; or
(2) alternately charged with MSW in the hopper.

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 5%, by weight, of the facility's total fuel. [1] Compliance with this limitation shall be determined on a calendar month basis.

f. *Biosolids (includes Class B, A and AA biosolids) that are not Liquid Biosolids.* Subject to the conditions and limitations contained in this permit, biosolids (includes Class B, A and AA biosolids) that are not liquid biosolids may be used as fuel at the facility (i.e., an authorized fuel that is a segregated non-MSW material). The total quantity of biosolids that are not liquid biosolids 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.

"**Biosolids**" and "**liquid biosolids**" under this permit are specifically described in Rule 62-640.200(6)&(28), F.A.C. and are defined as follows:

62-640.200 Definitions.

"**Biosolids**" means the solid, semisolid, or liquid residue generated during the treatment of domestic wastewater in a domestic wastewater treatment facility, formerly known as "domestic wastewater residuals" or "residuals." Not included is the treated effluent or reclaimed water from a domestic wastewater treatment plant. Also not included are solids removed from pump stations and lift stations, screenings and grit removed from the preliminary treatment components of domestic wastewater treatment facilities, other solids as defined in subsection 62-640.200(31), F.A.C., and ash generated during the incineration of biosolids. Biosolids include products and treated material from biosolids treatment facilities and septage management facilities regulated by the Department.

"**Liquid biosolids**" means any biosolids that are less than 12% solids by weight, or that are determined to contain free liquids as defined by Method 9095B (Paint Filter Liquids Test), November 2004, as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Pub. No. SW-846), January 3, 2008, 73 FR 486, which is hereby adopted and incorporated by reference and is available from the Department of Environmental Protection, Domestic Wastewater Section, M.S. 3540, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 or any of the Department's District Offices.

"Liquid biosolids" as defined in Rule 640.200, F.A.C., shall not be unloaded onto the tipping floor or combusted in the municipal solid waste combustor Unit Nos. 1, 2 and 3. [2]

g. *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) Unsorted mixtures of construction and demolition debris, or that fraction of sorted construction and demolition debris that is predominantly non-combustible. Non-combustible construction and demolition debris shall include concrete, metals, gypsum products, plaster, rock, brick, and masonry.[1]
   (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 (3) or (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 and 62-213.440, F.A.C.; [1] PSD-FL-151B, Condition 4.f.; and, [2] Permit No. 0710119-009-AC/PSD-FL-151F.]

A.7. Auxiliary Burners - Methods of Operation - Fuels. Auxiliary burners for each MWC shall be fired only with natural gas or propane. Natural gas or propane may be used as a supplemental fuel during warm-up, startups, shutdowns, and at other times when necessary and consistent with good combustion practices. These devices shall be used at startup during the introduction of MSW fuel until design furnace gas temperature is achieved. [Rules 62-4.160(2), 62-210.200 (PTE), 62-213.410, & 62-213.440, F.A.C.; and, PSD-FL-151B.]

Air Pollution Control Technologies and Measures

A.8. Mercury Removal Procedures. The owner or operator must operate the pollution control equipment at the facility under procedures designed to minimize emissions of mercury and maximize the removal of mercury from the flue gas of the facility. An activated carbon injection system for mercury control approved by the Department shall be operated continuously whenever MSW is burned at the facility. The emissions of

mercury from the facility shall not exceed the standard established in the conditions of this permit. [PSD-FL-151.]

A.9. 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.]

A.10. Activated Carbon Injection Rate. The owner or operator shall determine through Department approved operational testing, the feed rate for activated carbon injection which provides the most effective mercury removal over the normal operating regime for the facility while achieving the levels stated hereafter. Following determination of the feed rate, the owner or operator shall not reduce it without specific written permission from the Department. [PSD-FL-151.]

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.11. - A.23.** are based on the specified averaging time of the applicable test method.

{Permitting note: Most of the current emission standards and limitations from the original PSD-FL-151 permit (BACT) remain more stringent than the 40 CFR 60 Subpart Cb (including the May 10, 2006 federal amendments). The May 10, 2006 amendments did change some of the emission standards and limitations for Units 1 and 2. Three (3) air pollutant standards/limitations were lowered under the amendments: Hg, cadmium (Cd) and lead (Pb).}

Stack Emissions

A.11. Particulate Matter.

a. The emission limit for particulate matter (PM)/PM_{10} contained in the gases discharged to the atmosphere is 22.9 milligrams per dry standard cubic meter (mg/dscm), corrected to 7 percent oxygen. [Rule 62-204.800(9)(b)3.a., F.A.C.; 40 CFR 60.33b(a)(1)(i); and, Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

b. PM emissions shall not exceed 5.34 lbs/hour per unit. [Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

A.12. 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, Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

A.13. Cadmium. The emission limit for cadmium (Cd) contained in the gases discharged to the atmosphere is 35 micrograms per dry standard cubic meter (µg/dscm), 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.14. Mercury.

a. The emission limit for mercury (Hg) contained in the gases discharged to the atmosphere is 50 micrograms per dry standard cubic meter (µg/dscm) 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, Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

b. Hg emissions shall not exceed 0.0271 lbs/hour per unit. [Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

A.15. Lead.

a. The emission limit for lead (Pb) contained in the gases discharged to the atmosphere is 400 micrograms per dry standard cubic meter (µg/dscm), corrected to 7 percent oxygen. [Rule 62-204.800(9)(b)3.c., F.A.C.; and, 40 CFR 60.33b(a)(4); and, Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

b. Pb emissions shall not exceed 0.108 lbs/hour per unit. [Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

A.16. Sulfur Dioxide.

a. 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 20 percent of the potential sulfur dioxide emission concentration (80-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, Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

b. SO_2 emissions shall not exceed 41 lbs/hour per unit. [Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

A.17. Sulfuric Acid Mist. Sulfuric acid mist (SAM) emissions shall not exceed 9.85 lbs/hour per unit. [Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.i.]

A.18. Hydrogen Chloride.

a. The emission limit for hydrogen chloride (HCl) contained in the gases discharged to the atmosphere is 25 parts per million by volume (ppmv) 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, Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

b. HCl emissions shall not exceed 17.70 lbs/hour per unit. [Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

A.19. Dioxin/Furan.

a. 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 (ng/dscm) (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, Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

b. D/F emissions shall not exceed 7.0×10^{-6} lbs/hour per unit. [Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

A.20. Nitrogen Oxides.

a. As determined by the CEMS, the emission limit for nitrogen oxides (NOx) contained in the gases discharged to the atmosphere is 180 parts per million by volume (ppmv), 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, Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

b. NOx emissions shall not exceed 80 lbs/hour per unit. [Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

A.21. Carbon Monoxide.

a. As determined by the CEMS, the emission limit for carbon monoxide (CO) contained in the gases discharged to the atmosphere from a mass burn waterwall type municipal waste combustor technology is 100 parts per million by volume, measured at the combustor outlet in conjunction with a measurement of

oxygen concentration, corrected to 7 percent oxygen, dry basis, and calculated on a 4-hour block average. [Rule 62-204.800(9)(b)3.i., F.A.C.; and, 40 CFR 60.34b(a); and, Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

b. CO emissions shall not exceed 27.2 lbs/hour per unit. [Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

A.22. Ammonia Slip. In no case shall ammonia slip from exhaust gases exceed 50 parts per million, by volume. [Permit No. 0710119-008-AC/PSD-FL-151E, Condition 2.]

Fugitive Ash Emissions

A.23. 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.24. 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. Failures that are caused entirely or in part by poor maintenance, careless operation, any other preventable upset condition, or preventable equipment breakdown shall not be considered malfunctions.[1] [Rule 62-210.700(1)&(5), F.A.C.; [1] PSD-FL-151B; and, authorized by the Department on November 1, 2000.]

A.25. NSPS Startup, Shutdown and Malfunction Provisions.

a. For the purpose of compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a), if a loss of boiler water level control (*e.g.,* boiler waterwall tube failure) or a loss of combustion air control (*e.g.,* loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence. During such periods of malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of 40 CFR 60.59b(d)(7). [40 CFR 60.38b & 40 CFR 60.58b(a)(1)(iii)]

b. During a loss of boiler water level control or loss of combustion air control malfunction period as specified in paragraph (a)(1)(iii) of 40 CFR 60.58b, a diluent cap of 14 percent for oxygen or 5 percent for carbon dioxide may be used in the emissions calculations for sulfur dioxide and nitrogen oxides. [40 CFR 60.38b & 40 CFR 60.58b(b)(8)]

{Permitting note: See Appendices Cb and Eb.}

A.26. Best Operational Practices. The owner or operator shall maintain a manual that identifies and describes best operational practices that will be used during periods of startup, shut down and malfunction at this facility. [PSD-FL-151B.]

A.27. 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. and PSD-FL-151, Condition 3.f.(iii).]

Continuous Monitoring Requirements

{Permitting Note: The following continuous monitors are installed on these emissions units: steam flow, inlet temperature to baghouse, opacity, SO_2, NOx, CO, O_2 and carbon dioxide (CO_2.)}

A.28. 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).]

A.29. Inlet Temperature to Particulate Matter Control Device (Baghouse). 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.; and, 40 CFR 60.34b, 40 CFR 60.53b & 40 CFR 60.58b(i)(7).]

A.30. Pressure Drop Monitoring Equipment for Baghouse. The baghouse shall be equipped with pressure drop monitoring equipment. [PSD-FL-151A, Condition 4.e.]

A.31. 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.; 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); and PSD-FL-151.]

A.32. 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.; 40 CFR 60.38b, 40 CFR 60.58b(b); and PSD-FL-151.]

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.33. 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	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Methods shall be performed as necessary to support other methods.
EPA Methods 5, 17, 201[1] or 201A	Methods for Determining PM/PM_{10} Emissions. The minimum sample volume shall be 1.7 cubic meters.

Method(s)	Description of Method(s) and Comment(s)
EPA Methods 6, 6A or 6C	Determination of SO_2 Emissions (6C is Instrumental).
EPA Methods 7, 7C, 7E or 19	Determination of NOx Emissions (7E is Instrumental).
EPA Method 8	Determination of SAM Emissions.
EPA Method 9	Visual Determination of the Opacity of Emissions (VE).
EPA Method 10	Measurement of CO Emissions (Instrumental). The method shall be based on a continuous sampling train.
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.[2]
EPA Method 26 or 26A	Determination of HCl Emissions from Stationary Sources. On January 8, 2010, the Department approved changes in the EPA Method 26 testing methodology.[3]
EPA Method CTM-027 (Conditional Test Method) [1]	Procedure for Collection and Analysis of Ammonia. *{Note: This is an EPA conditional test method. The minimum detection limit shall be 1 ppm.}*
EPA Method 29	Determination of Metal (e.g., Cd, Hg and Pb) Emissions from Stationary Sources.

[1] Method CTM-027 is published on EPA's Technology Transfer Network web site at http://www.epa.gov/ttn/emc/ctm.html. The above methods are described in 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. SAM Testing: Demonstration of compliance with the SO_2 emission limit shall be used as a surrogate for determining compliance with the SAM emission limit. If the Department has reason to believe that the SAM limit is not being met, it may require a special compliance test to be performed in accordance with Rule 62-297.310(7)(b), F.A.C.[1] [Rule 62-204.800(9)(b)7., F.A.C.; [1] PSD-FL-151E; [2] Appendix ATP, U.S. EPA Alternative Test Procedure Approval dated June 3, 2004; and, [3] Appendix ASP, DEP Approvals dated May 1, 2015 & January 8, 2010.]

A.34. 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.35. Annual Compliance Test. The owner or operator shall conduct a performance test for PM, opacity, Cd, Hg, Pb, HCl 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). [Rules 62-297.310(8)(a) & 62-204.800(9)(b)7., F.A.C.; and Permit No. 0710119-008-AC/PSD-FL-151E, Condition 3.c.]

{Permitting note: Refer to the attached e-mails dated January 22, 2009 between the Department and the U.S. EPA regarding the required testing frequency for HCl. U.S. EPA indicated that it intended for HCl testing in Subpart Eb to be allowed the same 9-to-15-month window as the other pollutants.}

A.36. Continuous Opacity Monitoring System (COMS) Data. An owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity

standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 40 CFR 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c) of this part, that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine compliance with the opacity standard. [40 CFR 60.11(e)(5); Rule 62-204.800(8)(d), F.A.C. & 62-204.800(9)(b)7., F.A.C.; and, 40 CFR 60.38b & 40 CFR 60.58b.]

A.37. VE Test Not Required When Using COMS. The permittee may demonstrate compliance with the opacity limits based on data collected by the required COMS. When the permittee elects to measure emissions by a COMS the system must meet the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., and the manufacturer's recommended quality assurance and quality control measures. Therefore, pursuant to Rule 62-297.310(8)(a)5.c., F.A.C. an annual emissions test is not required for visible emissions (VE). [40 CFR 60.11(e)(5); and, Rule 62-297.310(8)(a)5.c., F.A.C.]

A.38. Compliance Test Prior To Renewal. Prior to permit renewal, Emissions Unit ID Nos. 001 and 002 shall be tested to demonstrate compliance with the emission limitations and standards for ammonia slip. [Rules 62-297.310(8)(b)3., F.A.C.; and Permit No. 0710119-008-AC/PSD-FL-151E, Condition 3.c.]

A.39. Dioxins/Furans. The alternative performance testing schedule for dioxins/furans (D/F) specified in 40 CFR 60.58b(g)(5)(iii) 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.40. Test Protocol. A test protocol shall be submitted for approval to the Department's (DEP) South District (SD) Office and to the Bureau of Air Regulation at least 30 (thirty) days prior to testing. [Permit No. 0710119-008-AC/PSD-FL-151E, Condition 3.c.]

A.41. Compliance Testing Conditions. The weight of MSW being fed to each combustor during the stack test shall be continuously monitored and recorded by a weighing device which is properly calibrated. Stack tests shall be conducted upstream and downstream of the applicable control device for SO_2, Hg and HCl. Soot blowers shall be operated in a mode consistent with the normal cleaning requirements of the system during the compliance testing. [Permit No. 0710119-008-AC/PSD-FL-151E, Condition 3.c.]

A.42. VE Testing Conditions. At least one one-hour VE test shall be conducted simultaneously with particulate matter testing for the emissions from the dry scrubber/baghouse. At least one 30-minute VE test shall be conducted for the ash handling building. [Permit No. 0710119-008-AC/PSD-FL-151E, Condition 3.c.]

A.43. PM Testing Conditions. Testing of the MWC units for particulate matter emissions shall be performed using three one-hour test runs so that two one-hour runs are conducted during normal operation and one one-hour run is conducted during soot blowing conditions. [Permit No. 0710119-008-AC/PSD-FL-151E, Condition 3.c.]

Recordkeeping and Reporting Requirements

A.44. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
Excess Emissions from Malfunctions, if requested by the Compliance Authority	Every 3 months (quarter)	**A.45.**
Excess Emissions	Every 3 months (quarter)	**A.46.**
NSPS Excess Emissions and Monitoring System Performance	Every 6 months (semi-annual), except when more frequent reporting is specifically required	**A.47.**

[Rule 62-210.700(6), F.A.C.; and, 40 CFR 60, Subpart A.]

A.45. 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.46. Quarterly Excess Emissions Report. Submit to the Department a written report of emissions in excess of emission limiting for each calendar quarter. The nature and cause of the excess emissions shall be explained. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report quarterly stating that no excess emissions occurred. This report does not relieve the owner or operator of the legal liability for violations. [PSD-FL-151, Condition 3.f.(v).]

A.47. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

A.48. Records of Non-MSW. The facility 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.6.e., A.6.f.** and **A.6.g.**). 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.6.e., A.6.f.** and **A.6.g.**), 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 5% limitation. [1]

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 and 62-213.440, F.A.C.; and, [1] PSD-FL-151B; and, Permit No. 0710119-009-AC/PSD-FL-151F.]

A.49. 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). [Rule 62-204.800(9)(b)7.b, F.A.C.]

A.50. Records. The owner or operator shall maintain a central file containing all measurements, records, and other data that are required to be collected pursuant to the conditions of this permit. This file shall include but not be limited to:

a. the data collected from in-stack monitoring requirements;
b. the records of MSW input rate;
c. the results of all source tests or performance tests;
d. the amount of ammonia, activated carbon, or other chemicals used for NOx and mercury control;
e. calibration logs for all instruments; and,
f. maintenance/repair logs for any worked performed which is subject to this permit.

The permittee shall keep accurate records of MSW being fired to each combustor along with the weight percent of used tires in the waste stream being combusted on an estimated weekly basis for the entire life of this facility. [Rule 62-213.440(1)(b)2.b., F.A.C.; and, PSD-FL-151, Condition 3.e.]

Operator Practices, Training and Certification

A.51. Operating Practices. The owner or operator shall comply with the operating practices as set forth in 40 CFR 60.53b(b) and (c) of 40 CFR 60, Subpart Eb. [Rule 62-204.800(9)(b)4., F.A.C.; and, 40 CFR 60.34b & 40 CFR 60.53b.]

A.52. Operator Training and Certification. The owner or operator shall comply with the operator training and certification requirements of 40 CFR 60.54b of 40 CFR 60, Subpart Eb. Compliance with these requirements shall be conducted according to the schedule specified in 40 CFR 60.39b(c)(4) of 40 CFR 60, Subpart Cb. [Rule 62-204.800(9)(b)5., F.A.C.; and, 40 CFR 60.35b & 40 CFR 60.54b.]

A.53. Certified Personnel. A list of all certified personnel shall be submitted to the DEP SD Office. The owner or operator shall inform the DEP SD Office of any planned training sessions so that Department staff may attend any such training sessions related to operation and maintenance of air pollution control devices. [PSD-FL-151.]

EG 40 CFR 60 Requirements

A.54. 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.]

{Permitting note: Pursuant to Rule 62-204.800(9)(a)1., F.A.C., the Emission Guidelines for Existing Sources shall be controlling over other standards in the air pollution rules of the Department except that any emissions limiting standard contained in or determined pursuant to the air pollution rules of the Department which is more stringent than one contained in an Emission Guideline, or which regulates emissions of pollutants or emissions units not regulated by an applicable Emission Guideline, shall apply.}

A.55. 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 Requirements

A.56. NSPS Requirements - Subpart Eb. Except as otherwise provided in this permit, these emissions units shall comply with all applicable cross referenced 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.57. NSPS Requirements - Subpart A. This emissions unit shall comply with all applicable cross referenced 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.58. 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)(g), F.A.C.]

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Subsection B. Emissions Unit 006
Municipal Waste Combustor Unit 3

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

E.U. ID No.	Brief Description
006	Municipal Waste Combustor Unit 3

Emissions Unit ID No. 006 is a Riley Power manufactured municipal solid waste (MSW) combustor designated as "Unit 3." The unit consists of a mass burn water wall boiler with two auxiliary natural gas/propane fired burners. The combustion system incorporates the technology of German-based Martin GmbH. Waste is combusted at furnace temperatures exceeding 1,800 degrees Fahrenheit, and reduced to an inert ash residue. The burners are used to fire the MSW combustors during startup, shutdown, and at other times when necessary and consistent with good combustion practices.

This municipal waste combustor (MWC) has a nominal design rated capacity of 660 tons MSW per day and 197,400 lbs/hour steam production with MSW having a heating value of 5,000 Btu/lb. Short term capacity is restricted by limiting steam production to 197,400 lbs/hour, which effectively limits heat input. The net design steam enthalpy for useful work is 1,158 Btu/lb. This unit produces up to 20 MW of electricity daily.

Odor is controlled by drawing combustion air from the refuse tipping floor area. Unit 3 is substantially similar to Units 1 and 2, albeit with additional controls as required in order to comply with the more stringent NSPS 40 CFR 60 Subpart Eb and BACT limits. A spray dry absorber and baghouse are used for the control of acid gases and particulate matter, a selective non-catalytic reduction (SNCR) system and an optional flue gas recirculation (FGR) system for the control of nitrogen oxides (NOx), and an activated carbon injection (ACI) system for the control of mercury (Hg) and certain organic emissions. Activated carbon is injected into the flue gases prior to the baghouse to control Hg emissions. Captured dry ash particles fall into hoppers and are transported by an enclosed conveyor system to the bottom ash discharger where they are wetted to prevent dust, and mixed with the bottom ash.

All three units, Units 1, 2 (see Subsection III.A.) and 3, exhaust to a common stack consisting of three separate flues. The stack parameters for the Unit 3 flue are: height, 275 feet; diameter, 6.2 feet; exit temperature, 270 degrees F; and, actual stack gas flow rate, 163,600 acfm.

Unit 3 began commercial operation on August 18, 2007.

{Permitting note(s): This emissions unit is regulated under 40 CFR 60, Subpart Eb, Standards of Performance for Large Municipal Waste Combustors adopted and incorporated by reference in Rule 62-204.800(8)(b)7., F.A.C.; 40 CFR 61 Subpart E, NESHAP for Mercury (when combusting biosolids); 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-151D&E]; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); and, Florida Electrical Power Plant Site Certifications [PA90-30].}

Equipment and Operational Limitations

B.1. Name Plate. The combustor (boiler) shall have a metal name plate affixed in a conspicuous place on the shell showing the manufacturer, model number, type waste, and rated capacity. [Rule 62-4.160(2), F.A.C.; and, Permit No. PSD-FL-151D/0710119-005-AC.]

B.2. Stack Height. The height of the boiler exhaust stack shall not be less than 276 feet above grade (271 feet for structural stack plus 5 feet for flue). [Rule 62-4.160(2), F.A.C.; and, Permit No. PSD-FL-151D/0710119-005-AC.]

B.3. Changes/Modifications. The owner or operator shall submit to the Department's Office of Permitting and Compliance, for review any changes in, or modifications to: the method of operation; process or pollution control equipment; increase in hours of operation; equipment capacities; or any change which would result in an increase in potential/actual short term or long term emissions. Depending on the size and scope of the modification, it may be necessary to submit an application for, and obtain, an air construction permit prior to making the desired change. [Permit No. PSD-FL-151D/0710119-005-AC, Condition C.1.]

Essential Potential to Emit (PTE) Parameters

B.4. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.; and, Permit No. PSD-FL-151D/0710119-005-AC, Condition D.1.]

B.5. Capacity. The following maximum values (capacities) based on a heating value of 5,000 Btu/lb of MSW shall not be exceeded:
a. 660 tons/day (TPD) MWC unit throughput of MSW;
b. 291.5 MMBtu/hr MWC unit heat input; and,
c. 197,400 lbs/hr MWC unit steam production on a 4-hour block arithmetic average.
See 40 CFR 60.58b(j) of Appendix 40 CFR 60, Subpart Eb for additional restrictions on capacity. [Rule 62-4.160(2) & 62-210.200 (PTE), F.A.C.; 40 CFR 60.58b(j); and, Permit No. PSD-FL-151D/0710119-005-AC, Condition B.2.]

B.6. 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 60.51b for additional restrictions on operating rate. [Rule 62-297.310(3)(b), F.A.C.; and, 40 CFR 60.51b.]

B.7. MWCs - Methods of Operation - Fuels.
a. *Allowable Fuels.*
(1) The only fuels allowed to be burned in the MWCs are municipal solid waste (MSW), with natural gas/propane as an auxiliary fuel. Other fuels or wastes, not specifically listed herein, shall not be burned without written prior approval from the Department. Lee County shall minimize emissions of mercury through a battery collection program.[1] Fuels or wastes specifically authorized herein do not require prior Department approval before combustion.
(2) The primary fuel for the facility is MSW, 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) explosives;
(h) 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) nickel-cadmium batteries pursuant to Section 403.7192(3), F.S.;
(d) mercury containing devices and lamps pursuant to Sections 403.7186(2) & (3) , F.S.

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 either:
   (1) well mixed with MSW on the tipping floor; or
   (2) alternately charged with MSW in the hopper.
   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 5%, by weight, of the facility's total fuel. [3] Compliance with this limitation shall be determined on a calendar month basis.

f. *Biosolids (includes Class B, A and AA biosolids) that are not Liquid Biosolids.* Subject to the conditions and limitations contained in this permit, biosolids (includes Class B, A and AA biosolids) that are not liquid biosolids may be used as fuel at the facility (i.e., an authorized fuel that is a segregated non-MSW material). The total quantity of biosolids that are not liquid biosolids 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.

   "**Biosolids**" and "**liquid biosolids**" under this permit are specifically described in Rule 62-640.200(6)&(28), F.A.C. and are defined as follows:

   62-640.200 Definitions.

   "**Biosolids**" means the solid, semisolid, or liquid residue generated during the treatment of domestic wastewater in a domestic wastewater treatment facility, formerly known as "domestic wastewater residuals" or "residuals." Not included is the treated effluent or reclaimed water from a domestic wastewater treatment plant. Also not included are solids removed from pump stations and lift stations, screenings and grit removed from the preliminary treatment components of domestic wastewater treatment facilities, other solids as defined in subsection 62-640.200(31), F.A.C., and ash generated during the incineration of biosolids. Biosolids include products and treated material from biosolids treatment facilities and septage management facilities regulated by the Department.

   "**Liquid biosolids**" means any biosolids that are less than 12% solids by weight, or that are determined to contain free liquids as defined by Method 9095B (Paint Filter Liquids Test), November 2004, as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Pub. No. SW-846), January 3, 2008, 73 FR 486, which is hereby adopted and incorporated by reference and is

available from the Department of Environmental Protection, Domestic Wastewater Section, M.S. 3540, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 or any of the Department's District Offices.

"Liquid biosolids" as defined in Rule 640.200, F.A.C., shall not be unloaded onto the tipping floor or combusted in the municipal solid waste combustor Unit Nos. 1, 2 and 3. [4]

g. *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. [1] Compliance with this limitation shall be determined on a calendar month basis.
   (1) Unsorted mixtures of construction and demolition debris, or that fraction of sorted construction and demolition debris that is predominantly non-combustible. Non-combustible construction and demolition debris shall include concrete, metals, gypsum products, plaster, rock, brick, and masonry. [2]
   (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 (3) or (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 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 and 62-213.440, F.A.C.; and, [1] PSD-FL-151D, Condition B.6.6.; [2] PSD-FL-151D, Condition B.6.7(a); and, [3] PSD-FL-151D, Condition B.24.; and, [4] Permit No. 0710119-009-AC/PSD-FL-151F.]

B.8. Auxiliary Burners - Methods of Operation - Fuels. Auxiliary burners for each MWC shall be fired only with natural gas or propane. Natural gas or propane may be used as a supplemental fuel during warm-up, startups, shutdowns, and at other times when necessary and consistent with good combustion practices. These devices shall be used at startup during the introduction of MSW fuel until design furnace gas temperature is achieved. [Rules 62-4.160(2), 62-210.200 (PTE), 62-213.410, and 62-213.440, F.A.C.; and, Permit No. 0710119-005-AC/PSD-FL-151D, Condition B.9.]

Air Pollution Control Technologies and Measures

B.9. 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.]

B.10. Air Pollutant Emission Control Equipment.

a. *Particulate Matter*. The unit shall maintain a particulate matter control baghouse designed, constructed and operated so as not to exceed a maximum emission rate of 20.6 mg/dscm corrected to 7 percent O_2. The baghouse shall be equipped with pressure drop monitoring equipment.

b. *Spray Dryer Scrubber*. The unit shall maintain a spray dryer scrubber designed, constructed and operated so as to remove SO_2 at an efficiency of 80 percent, or not to exceed a maximum emission rate of 26 ppmvd corrected to 7 percent O_2 based upon a 24-hour block geometric mean, whichever is less stringent.

c. *Carbon Injection.* The unit shall maintain a carbon injection system. The carbon injection rate must be measured continuously and maintained in compliance with the requirements set forth in this permit as well as 40 CFR 60.58b(m).

d. *Selective Non Catalytic Reduction System.* The unit shall maintain a selective non catalytic reduction system designed, constructed and operated so as not to exceed a maximum NOx emission rate of 150 ppmvd corrected to 7 percent O_2 on a 24-hour block arithmetic mean (midnight to midnight) as well as 110 ppmvd corrected to 7 percent O_2 on a 12-month rolling average and designed to meet 15 ppmvd @ 7% O_2 ammonia slip on a 24 hour average. Note: this permit does not anticipate nor authorize ammonia plumes.

[Permit No. 0710119-005-AC/PSD-FL-151D and Rule 62-4.070(1)&(3), 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 **B.11. - B.23.** are based on the specified averaging time of the applicable test method.

{Permitting note: The current emission standards and limitations from the PSD-FL-151D permit (BACT) for *PM and Hg remain more stringent than the 40 CFR 60 Subpart Eb (including the May 10, 2006 federal amendments). The May 10, 2006 amendments did not change the emission standards and limitations for Unit 3.}*

Stack Emissions

B.11. Particulate Matter.

a. The emission limit for particulate matter (PM)/PM_{10} contained in the gases discharged to the atmosphere is 20.6 milligrams per dry standard cubic meter (mg/dscm), corrected to 7 percent oxygen. [Rule 62-204.800(8)(b)7., F.A.C.; 40 CFR 60.52b(a)(1)(i); and, Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

b. PM/PM_{10} emissions shall not exceed 5.12 lbs/hour. [Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

B.12. 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(8)(b)7., F.A.C.; 40 CFR 60.52b(a)(2); and, Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

B.13. Cadmium.

a. The emission limit for cadmium (Cd) contained in the gases discharged to the atmosphere is 20 micrograms per dry standard cubic meter (µg/dscm), corrected to 7 percent oxygen. [Rule 62-

204.800(8)(b)7., F.A.C.; 40 CFR 60.52b(a)(3)(i); and, Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

b. Cd emissions shall not exceed 5 x 10^{-3} lbs/hour. [Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

B.14. Mercury.

a. The emission limit for mercury (Hg) contained in the gases discharged to the atmosphere is 28 micrograms per dry standard cubic meter (µg/dscm) 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(8)(b)7., F.A.C.; 40 CFR 60.52b(a)(5)(i); and, Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

b. Hg emissions shall not exceed 0.0168 lbs/hour. [Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

B.15. Lead.

a. The emission limit for lead (Pb) contained in the gases discharged to the atmosphere is 200 micrograms per dry standard cubic meter (µg/dscm), corrected to 7 percent oxygen. [Rule 62-204.800(8)(b)7., F.A.C.; 40 CFR 60.52b(a)(4)(i); and, Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8..]

b. Pb emissions shall not exceed 0.05 lbs/hour. [Permit No. PSD-FL-151D/0710119-005-AC, Condition B.8.]

B.16. Sulfur Dioxide.

a. 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 26 parts per million by volume (ppmv) or 20 percent of the potential sulfur dioxide emission concentration (80-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(8)(b)7., F.A.C.; 40 CFR 60.52b(b)(1); and, Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

b. SO_2 emissions shall not exceed 56.9 lbs/hour. [Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

B.17. Sulfuric Acid Mist. Sulfuric acid mist (SAM) emissions shall not exceed 15 parts per million by volume, corrected to 7 percent oxygen, dry basis; and, 15.1 lbs/hour. [Permit No. 0710119-008-AC/PSD-FL-151E, Condition B.8.]

B.18. Hydrogen Chloride.

a. The emission limit for hydrogen chloride (HCl) contained in the gases discharged to the atmosphere is 25 parts per million by volume (ppmv) 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(8)(b)7., F.A.C.; 40 CFR 60.52b(b)(2); Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

b. HCl emissions shall not exceed 46.76 lbs/hour. [Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

B.19. Dioxin/Furan.

a. 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 13 nanograms per dry standard cubic meter (ng/dscm) (total mass), corrected to 7 percent oxygen. [Rule 62-204.800(8)(b)7., F.A.C.; 40 CFR 60.52b(c)(1); and, Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8..]

b. D/F emissions shall not exceed 3.2 x 10^{-6} lbs/hour. [Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

B.20. Nitrogen Oxides.

a. As determined by the CEMS, the emission limit for nitrogen oxides (NOx) contained in the gases discharged to the atmosphere are: 150 parts per million by volume (ppmv), corrected to 7 percent oxygen, dry basis, 24-hour average; and, 110 ppmv, corrected to 7 percent oxygen, dry basis, 12-month rolling average. Compliance with the 24-hour average emission limit is based on the 24-hour daily arithmetic average of the hourly emission concentrations using continuous emission monitoring system outlet data. [Rule 62-204.800(8)(b)7., F.A.C.; 40 CFR 60.52b(d); and, Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

b. NOx emissions shall not exceed 70.8 lbs/hour. [Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

B.21. Carbon Monoxide.

a. As determined by the CEMS, the emission limit for carbon monoxide (CO) contained in the gases discharged to the atmosphere from a mass burn waterwall type municipal waste combustor technology are: 100 parts per million by volume (ppmv), measured at the combustor outlet in conjunction with a measurement of oxygen concentration, corrected to 7 percent oxygen, dry basis, and calculated on a 4-hour block average; and, 80 ppmv, corrected to 7 percent oxygen, dry basis, 12-month rolling average. [Rule 62-204.800(8)(b)7., F.A.C.; and, 40 CFR 60.53b(a); and, Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

b. CO emissions shall not exceed 28.73 lbs/hour (based on the 100 ppmvd limit). [Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

B.22. Ammonia Slip. Ammonia slip from the exhaust gas shall not exceed 30 parts per million by volume, corrected to 7 percent oxygen, dry basis. [Permit No. PSD-FL-151E/0710119-008-AC, Condition B.8.]

Fugitive Ash Emissions

B.23. 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(8)(b)7., F.A.C.; 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.

B.24. 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 this emissions unit. A malfunction means any unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, any other preventable upset condition, or preventable equipment breakdown shall not be considered malfunctions.[1] Normal operating practices for controlling CO emissions involves the use of auxiliary fuel burners. However, use of these burners when operators cannot control boiler water or combustion air could result in the

possibility of an explosion or severe damage to the MWC.[1] [Rule 62-210.700(1)&(5), F.A.C.; [1] PSD-FL-151D, Condition B.7.(b); and, authorized by the Department on October 13, 2003.]

B.25. NSPS Startup, Shutdown and Malfunction Provisions.

a. For the purpose of compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a), if a loss of boiler water level control (*e.g.*, boiler waterwall tube failure) or a loss of combustion air control (*e.g.*, loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence. During such periods of malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of 40 CFR 60.59b(d)(7). [40 CFR 60.58b(a)(1)(iii)]

b. During a loss of boiler water level control or loss of combustion air control malfunction period as specified in paragraph (a)(1)(iii) of 40 CFR 60.58b, a diluent cap of 14 percent for oxygen or 5 percent for carbon dioxide may be used in the emissions calculations for sulfur dioxide and nitrogen oxides. [40 CFR 60.58b(b)(8)]

{Permitting note: See Appendix Eb.}

B.26. Best Operational Practices. Pursuant to Permit No. PSD-FL-151D/0710119-005-AC, the permittee submitted to the DEP SD office an operational procedures manual that identifies and describes best operational practices that shall be followed during startup, shutdown, and malfunctions. [Permit No. PSD-FL-151D/0710119-005-AC, Condition D.3., and Rules 62-210.700(1)&(5) and 62-213.440, F.A.C.]

B.27. 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, inlet temperature to baghouse, opacity, SO_2, NOx, CO, O_2, and CO_2.}

B.28. 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 60.53b & 40 CFR 60.58b(i)(6).]

B.29. Inlet Temperature to Particulate Matter Control Device (Baghouse). 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.; and, 40 CFR 60.53b & 40 CFR 60.58b(i)(7).]

B.30. 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.; 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).]

B.31. 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.; 40 CFR 60.58b(b).]

Monitoring Requirements

B.32. Charging Rate Monitoring. The average daily solid waste charging rate shall be determined on a monthly basis and recorded for the MWC unit. The daily charging rate shall be determined each month on an average

daily basis for the MWC unit using the facility's truck scale weight data, refuse pit inventory data and MWC operating data for the preceding calendar month. Monthly truck scale weight records of the weight of solid waste received and processed at the unit, and refuse pit inventory data, shall be used to determine the amount of solid waste charged during the preceding calendar month on an average daily basis. The MWC load level measurements or other operating data shall be used to determine the number of operating hours for each day during the preceding calendar month. [Permit No. PSD-FL-151D/0710119-005-AC, Condition B.15.; and, Rule 62-4.070(1)&(3), F.A.C.]

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.}

B.33. 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	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Methods shall be performed as necessary to support other methods.
EPA Methods 5, 17, 201[1] or 201A	Methods for Determining PM/PM_{10} Emissions. The minimum sample volume shall be 1.7 cubic meters.
EPA Methods 6, 6A or 6C	Determination of SO_2 Emissions (6C is Instrumental).
EPA Methods 7, 7C, 7E or 19	Determination of NOx Emissions (7E is Instrumental).
EPA Method 8	Determination of SAM Emissions.
EPA Method 9	Visual Determination of the Opacity of Emissions (VE).
EPA Method 10	Measurement of CO Emissions (Instrumental). The method shall be based on a continuous sampling train.
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.[2]
EPA Method 26 or 26A	Determination of HCl Emissions from Stationary Sources. On January 8, 2010, the Department approved changes in the EPA Method 26 testing methodology.[3]
EPA Method CTM-027 (Conditional Test Method) [1]	Procedure for Collection and Analysis of Ammonia. *{Note: This is an EPA conditional test method. The minimum detection limit shall be 1 ppm.}*
EPA Method 29	Determination of Metal (e.g., Cd, Hg and Pb) Emissions from Stationary Sources.

[1] Method CTM-027 is published on EPA's Technology Transfer Network web site at http://www.epa.gov/ttn/emc/ctm.html. The above methods are described in 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. SAM Testing: Demonstration of compliance with the SO_2 emission limit shall be used as a surrogate for determining compliance with the SAM emission limit. If the Department has reason to believe that the SAM limit is not being met, it may require a special compliance test to be performed in accordance with Rule 62-297.310(7)(b), F.A.C. [1] [Rule 62-204.800(9)(b)7., F.A.C.; [1]

PSD-FL-151E; [2] Appendix ATP, U.S. EPA Alternative Test Procedure Approval dated June 3, 2004; and, [3] Appendix ASP, DEP Approvals dated May 1, 2015 & January 8, 2010.]

B.34. 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.35. Annual Compliance Test. The owner or operator shall conduct a performance test for PM, opacity, Cd, Hg, Pb, HCl 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). [Rules 62-297.310(8)(a) & 62-204.800(8)(b)7., F.A.C.]

{Permitting note: Refer to the attached e-mails dated January 22, 2009 between the Department and the U.S. EPA regarding the required testing frequency for HCl. U.S. EPA indicated that it intended for HCl testing in Subpart Eb to be allowed the same 9-to-15-month window as the other pollutants.

B.36. Continuous Opacity Monitoring System (COMS) Data. An owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 40 CFR 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c) of this part, that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine compliance with the opacity standard. [40 CFR 60.11(e)(5); Rule 62-204.800(8)(d), F.A.C. & 62-204.800(9)(b)7., F.A.C.; and, 40 CFR 60.38b & 40 CFR 60.58b.]

B.37. VE Test Not Required When Using COMS. The permittee may demonstrate compliance with the opacity limits based on data collected by the required COMS. When the permittee elects to measure emissions by a COMS the system must meet the performance specifications and quality assurance and quality control measures of 40 CFR part 60, adopted and incorporated in Rule 62-204.800, F.A.C., and the manufacturer's recommended quality assurance and quality control measures. Therefore, pursuant to Rule 62-297.310(8)(a)5.c., F.A.C. an annual emissions test is not required for visible emissions (VE). [40 CFR 60.11(e)(5); and, Rule 62-297.310(8)(a)5.c., F.A.C.]

B.38. Compliance Testing Conditions. The Method 9 test shall be conducted during one run of the particulate matter emissions test. The particulate matter emissions test shall be conducted under conditions representative of normal operations and at least one test run shall be conducted during a normal (soot blowing) cycle. Simultaneous CEMS data for NO_X shall be submitted with the annual ammonia stack test data and results (Method CTM-027 or equivalent for ammonia). [Rules 62-4.070(1)&(3) and 62-297.310, F.A.C.; and, Permit No. PSD-FL-151G/0710119-010-AC]

B.39. PM_{10} Testing. Since the limit for MWC Metals (as PM) is identical to the limit for PM_{10}, one annual test may suffice in determining compliance with both limits. [Permit No. PSD-FL-151D/0710119-005-AC, Condition B.10.(1).]

B.40. Hg Testing. The mercury emission rate shall be limited to no more than 0.028 mg/dscm at 7% O_2 or an 85% reduction (whichever is less stringent) based upon three valid test runs (annually) pursuant to Rule 62-297.310(1), F.A.C. However, the applicant may eliminate one test run per year in the event that the single run yields an inlet Hg concentration above 0.450 mg/dscm at 7% O_2, and the carbon injection system can be shown to have been operating properly. In the alternative, the applicant may retest within 30 days after receiving test results showing that the inlet Hg concentration was above 0.450 mg/dscm at 7% O_2 in two or more test runs, provided the applicant demonstrates that the carbon injection system was working properly during the test runs. [Permit No. PSD-FL-151D/0710119-005-AC, Condition B.10.(4).]

{Permitting note: The federal Hg limit is 0.080 mg/dscm at 7% O_2 or an 85% reduction (whichever is less stringent).}

B.41. Ammonia Slip Testing. The ammonia slip rate shall be established at 30 ppmvd @ 7% O_2 based upon annually stack test results. [Permit No. 0710119-010-AC/PSD-FL-151G]

Recordkeeping and Reporting Requirements

B.42. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
Excess Emissions from Malfunctions, if requested by the Compliance Authority	Every 3 months (quarter)	**B.43.**
NSPS Excess Emissions and Monitoring System Performance	Every 6 months (semi-annual), except when more frequent reporting is specifically required	**B.50.**

[Rule 62-210.700(6), F.A.C.; and, 40 CFR 60, Subpart A.]

B.43. 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.]

B.44. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

B.45. Records of Non-MSW. The facility 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 **B.7.e., B.7.f.** and **B.7.g.**). 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 **B.7.e., B.7.f.** and **B.7.g.**), 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 5% limitation. [1]

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 and 62-213.440, F.A.C.; and, [1] PSD-FL-151D, Condition B.24.; and, Permit No. 0710119-009-AC/PSD-FL-151F.]

B.46. Records. Records shall be maintained at the facility and shall include but not be limited to the items listed below. These records shall be made available upon request to the DEP SD Office for inspection at the facility.

a. Data collected from all monitoring instruments, including continuous monitoring systems, steam flow measurements and PM control device temperatures;
b. Continuous steam flow records on a 4-hour block average basis:
c. Records of daily solid waste charging rates and hours of operation derived from monthly truck scale data, refuse pit inventory, and operational records;
d. Amounts of activated carbon used for emissions control;
e. Calibration logs for all instruments subject to this permit; and,
f. Maintenance/repair logs for any work performed which is subject to this permit.

[Permit No. PSD-FL-151D/0710119-005-AC, Condition B.19.; and Rules 62-4.070(1)&(3) and 62-4.160, F.A.C.]

Operator Practices, Training and Certification

B.47. Operating Practices. The owner or operator shall comply with the operating practices as set forth in 40 CFR 60.53b(b) and (c) of 40 CFR 60, Subpart Eb. [Rule 62-204.800(8)(b)7., F.A.C.; and, 40 CFR 60.53b.]

B.48. Operating Practices. All operators (including supervisors) of air pollution control devices shall be properly trained and certified in plant specific equipment. A list of all such certified personnel shall be submitted to the Department's (DEP) South District (SD) Office. Department's staff shall be given notice of any formal training sessions related to operation and maintenance of air pollution control devices. [Permit No. PSD-FL-151D/0710119-005-AC, Condition C.3.]

NSPS 40 CFR 60 Requirements

B.49. 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.]

B.50. 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

B.51. 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)(g), F.A.C.]

B.52. Waste Disposal. The owner or operator shall treat, store, and dispose of all liquid, solid, and hazardous wastes in accordance with all applicable federal, state, and local regulations. This air pollution permit does not relieve the permittee from securing any other types of required permits, licenses, or certifications. [Permit No. PSD-FL-151D/0710119-005-AC, Condition E.1.]

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Subsection C. Emissions Unit 004
Ash Handling System

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

E.U. ID No.	Brief Description
	Material Handling
004	Ash Handling System

Emissions Unit ID No. 004 is the Ash Handling System. The Ash Handling System is comprised of conveyors, scalpers and a ferrous and non-ferrous removal system. The ash handling building is equipped with a baghouse which vents internally to the building. The ash handling system began initial operation on August 20, 1994.

{Permitting note(s): This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required; and, Prevention of Significant Deterioration (PSD) [PSD-FL-151, as amended]. The ash conveying systems of E.U. ID No. 004 are regulated under Rule 62-204.800(9)(b), F.A.C. which implements 40 CFR 60, Subpart Cb, Emissions Guidelines (EG) and Compliance Times for Large Municipal Waste Combustors.}

Essential Potential to Emit (PTE) Parameters

C.1. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200 (Definitions - Potential to Emit (PTE), F.A.C.; and, PSD-FL-151, as amended.]

C.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3)(b), 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 **C.4.** are based on the specified averaging time of the applicable test method.

C.3. Ash Handling Activities. The potential for dust generation by ash handling activities shall be mitigated by quenching the ash prior to loading in ash transport trucks. The ash handling facilities shall be enclosed. Residue from the grates, grate siftings, and ash from the combustor/boiler and fabric filter hoppers during normal operations shall be discharged into the ash quenching system, or otherwise handled in a manner to minimize visible dust. The ash/residue in the ash handling building shall remain sufficiently moist to prevent dust during storage and handling operations. [Permit No. 0710119-005-AC/PSD-FL-151D, Condition C.1(d); Rule 62-4.070(3), F.A.C.; and, 40 CFR 60.36b & 40 CFR 60.55b.]

C.4. (This condition only applies to the ash conveying systems of E.U. ID No. 004.) 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.

[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.

C.5. 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.6. 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.]

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.7. Test Methods. Required tests shall be performed in accordance with the following reference method(s):

Method(s)	Description of Method(s) and Comment(s)
EPA Method 22	Visual Determination of Fugitive Emissions from Material Sources

The above methods are described in 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. [Rule 62-204.800, F.A.C.]

C.8. Annual Compliance Test. The owner or operator shall conduct a performance test for fugitive ash 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). [Rule 62-297.310(7), F.A.C.; and, PSD-FL-151 and PSD-FL-151B.]

{Permitting note: Refer to the attached e-mails dated January 22, 2009 between the Department and the U.S. EPA regarding the required testing frequency for fugitive ash emissions. U.S. EPA indicated that it intended for fugitive ash emissions testing in Subpart Eb to be allowed the same 9-to-15-month window as the other pollutants.}"

C.9. Compliance Test Prior To Renewal. Prior to permit renewal, the ash handling system shall be tested to demonstrate compliance with the VE limitation. [Rule 62-297.310(7)(a)3., F.A.C.]

C.10. 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.]

Recordkeeping and Reporting Requirements

C.11. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
Excess Emissions from Malfunctions, if requested by the Compliance Authority	Every 3 months (quarter)	**C.12.**

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

C.12. 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.13. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

*{Permitting note: **Specific Conditions C.14. - C.17.** only apply to the ash conveying systems of E.U. ID No. 004.}*

EG 40 CFR 60 Requirements

C.14. 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.]

{Permitting note: Pursuant to Rule 62-204.800(9)(a)1., F.A.C., the Emission Guidelines for Existing Sources shall be controlling over other standards in the air pollution rules of the Department except that any emissions limiting standard contained in or determined pursuant to the air pollution rules of the Department which is more stringent than one contained in an Emission Guideline, or which regulates emissions of pollutants or emissions units not regulated by an applicable Emission Guideline, shall apply.}

C.15. 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 Requirements

{Permitting note(s): 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.}

C.16. 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.]

C.17. 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.]

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Subsection C. Emissions Unit 004
Ash Handling System

Subsection D. Emission Units 008 & 011
Engines

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

EU ID No.	Brief Description
008	Diesel Emergency Generator - 330 HP
011	Fire Pump No. 3 - 64 HP (WTE Transfer Station)

This subsection of the permit addresses three compression ignition (CI) type reciprocating internal combustion engines (RICE). Emissions unit 008 is a diesel fuel-fired engine-driven emergency generator. Emissions units 010 and 011 are diesel fuel-fired engine-driven emergency fire pumps. Air pollutant emissions from these engines are uncontrolled.

The following table provides important details for these engines:

EU ID No.	Engine Brake HP	Date of Commencement of Construction	Engine Model Year	Type of Engine	Displacement liters/cylinder (l/c)	Manufacturer Model # Engine Serial #
008	330	5/16/94	1994	Emergency Generator	7.0	Detroit Diesel® 200ROZD71 338362
011	64	March 2004	2004	Emergency Fire Pump	1.35	John Deere® 80 JU4HUF30 PE4045T311865

{Permitting Notes: These compression ignition reciprocating internal combustion engines (CI RICE) are regulated under 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) adopted in Rule 62.204.800(11)(b), F.A.C. This permit section addresses "existing" emergency stationary CI RICE generator and fire pump engines less than or equal to 500 HP with a displacement of less than 10 liters per cylinder that are located at a major source of HAPs, which commenced construction before 6/12/2006, and which have not been modified or reconstructed after this date. These engines are fired by ultra-low sulfur diesel fuel oil. Link to 40 CFR 63, Subpart ZZZZ

Essential Potential to Emit (PTE) Parameters

D.1. 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)(1)]

b. *Maintenance and Testing*. These units are 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. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 63.6640(f)(2)(i)]

c. *Non-emergency Situations*. These units are authorized to operate up to 50 hours per year (each) 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)(2)(iii)]

Emission Limitations and Operating Requirements

D.2. Work or Management Practice Standards.

a. *Oil*. Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63.6602 & Table 2c.1.a.]

b. *Air Cleaner*. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63.6602 & 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 63.6602 & 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) & Table 6.9.].

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 appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h) & Table 2c.1.]

f. *Oil Analysis*. The owner or operator has the option of using oil analysis to extend the oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in paragraph a., of this condition. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent 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 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.3. Hour Meter. The owner or operator must install and maintain a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

Compliance

D.4. Continuous Compliance. Each unit shall be in compliance with the emission limitations, operating limitations, and other requirements in this section at all times. [40 CFR 63.6605(a)]

D.5. 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.6. Notification, Performance and Compliance Records. The owner or operator must keep:

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. Records of the occurrence and duration of each malfunction of operation.
c. Records of all required maintenance performed on the hour meter.
d. Records of actions taken during periods of malfunction to minimize emissions in accordance with Specific Condition **D.5.**, including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation.
e. Records of the actions required in Specific Condition **D.2.d.** to show continuous compliance with each emission limitation or operating requirement.
f. Records of the Work or Management Practice Standards specified in Specific Condition **D.2.**
g. Records of the maintenance conducted in order to demonstrate that the RICE was operated and maintained according to your own maintenance plan.
h. 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 emergency demand response operation or for periods of voltage or frequency deviations, the owner or operator must keep records of the notification of the emergency situation, and the time of engine operation for these purposes.

[40 CFR 63.6655]

D.7. 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.8. Delay of Performing Work Practice Requirements. 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 in Specific Condit ion **D.2.** 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, Subpart ZZZZ, Table 2c, footnote 1]

General Provisions

D.9. 40 CFR 63 Subpart A - General Provisions. The owner or operator shall comply with the following 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. Link to 40 CFR 63, Subpart A - General Provisions

General Provisions Citation	Subject of Citation
§63.1	General applicability of the General Provisions
§63.2	Definitions (Additional terms defined in §63.6675)
§63.3	Units and abbreviations

General Provisions Citation	Subject of Citation
§63.4	Prohibited activities and circumvention
§63.5	Construction and reconstruction
§63.6(a)	Applicability
§63.9(a)	Applicability and State delegation of notification requirements
§63.9(b)(1)–(5)	Initial notifications (Except that §63.9(b)(3) is reserved)
§63.9(i)	Adjustment of submittal deadlines
§63.9(j)	Change in previous information
§63.10(a)	Administrative provisions for recordkeeping/reporting
§63.10(b)(1)	Record retention
§63.10(b)(2)(vi)–(xi)	Records
§63.10(b)(2)(xii)	Record when under waiver
§63.10(b)(2)(xiv)	Records of supporting documentation
§63.10(b)(3)	Records of applicability determination
§63.10(d)(1)	General reporting requirements
§63.10(f)	Waiver for recordkeeping/reporting
§63.12	State authority and delegations
§63.13	Addresses
§63.14	Incorporation by reference
§63.15	Availability of information

[40 CFR 63.6665 & Table 8 to Subpart ZZZZ of Part 63]

THE FOLLOWING SPECIFIC CONDITIONS APPLY TO ALL 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.10. 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.11. 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.12. 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.13. 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.]

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Subsection E. Emission Units 009 & 010
Fire Pump Engines

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

E.U. ID No.	Brief Description
009	Fire Pump No. 1 - 305 HP (EPA Tier 3 certified)
010	Fire Pump No. 2 - 300 HP

Emissions unit 009 consists of a stationary diesel fuel-fired compression ignition (CI) engine-driven emergency reciprocating internal combustion engine (RICE) manufactured by Clarke® that has a maximum engine rating of 305 brake-horsepower (bhp) at 100% load. Emissions unit 010 consists of a stationary diesel fuel-fired compression ignition (CI) engine-driven emergency reciprocating internal combustion engine (RICE) manufactured by John Deere® that has a maximum engine rating of 300 brake-horsepower (bhp) at 100% load. These engines are used to directly drive emergency fire pumps.

The following table provides important details for these emissions units:

E.U. ID No.	Engine Brake HP	Date of Construction	Model Year	Type of Engine	Displacement liters/cylinder (l/c)	Manufacturer Model # Engine Serial #
009	305	2014	2014	Emergency Fire Pump	6.8 {<10}	Clarke® JU6H-UFADX8 PE6C68L25776
010	300	--	July 2006	Emergency Fire Pump	6.8 {<10}	John Deere® 80 JW6H-UF40 RG6081H176198

{Permitting Notes: These emergency compression ignition reciprocating internal combustion engines (CI RICE) are regulated under 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) and 40 CFR 60, Subpart IIII – Standards of performance for Stationary Compression Ignition Internal Combustion Engines, adopted in Rules 62.204.800(11)(b) & (8)(b), F.A.C., respectively. This permit section addresses "new" stationary emergency CI RICE with a displacement of less than 10 liters per cylinder, located at an area source of HAP, that commenced construction on or after 6/12/2006, and that are fire pump engines. In accordance with provisions of 40 CFR 63.6590(c)(6), meeting the requirements of 40 CFR 60, Subpart IIII, satisfies compliance with the requirements of Subpart ZZZZ.} Link to 40 CFR 60, Subpart IIII

Essential Potential to Emit (PTE) Parameters

E.1. Authorized Fuel. These Stationary Internal Combustion Engines (ICE) 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 (ultra-low sulfur) for non-road 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), 80.510(b)]

E.2. Restricted Hours of Operation. The owner or operator must comply with the following limitations for these emergency engines. If you do not operate either these engines according to the requirements in paragraphs a. through c. of this condition, the engine will not be considered an emergency engine under 40 CFR 60, Subpart IIII and must meet all requirements for non-emergency engines.

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

b. *Maintenance and Testing*. These engines are 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. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 60.4211(f)(2)]

c. *Non-emergency Situations*. These engines are authorized to operate up to 50 hours per year (each) in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing.
[40 CFR 60.4211(f)(3)]

Emission Limitations

E.3. NMHC + NO_X Emissions. Emissions of non-methane hydrocarbons plus nitrogen oxide shall not exceed:
a. *E.U. ID No. 009.* 4.0 grams per kilowatt-hour (g/KW-hr) (3.0 grams per horse power-hr (g/HP-hr)).
b. *E.U. ID No. 010.* 10.5 g/KW-hr (7.8 g/HP-hr).
[40 CFR 60.4205(c) & Table 4]

E.4. CO Emissions. Emissions of carbon monoxide shall not exceed:
a. *E.U. ID No. 009.* 3.5 g/KW-hr (2.6 g/HP-hr).
b. *E.U. ID No. 010.* 3.5 g/KW-hr (2.6 g/HP-hr).
[40 CFR 60.4205(c) & Table 4]

E.5. PM emissions. Emissions of particulate matter shall not exceed:
a. *E.U. ID No. 009.* 0.2 g/KW-hr (0.15 g/HP-hr).
b. *E.U. ID No. 010.* 0.54 g/KW-hr (0.40 g/HP-hr).
[40 CFR 60.4205(c) & Table 4]

Monitoring Requirements

E.6. Hour Meter. The owner or operator must install a non-resettable hour meter on each engine if one is not already installed. [40 CFR 60.4209(a)]

Testing and Compliance Requirements

E.7. Operation and Maintenance. The owner or operator must operate and maintain these engines according to the manufacturer's written instructions. In addition, owners and operators may only change those settings that are permitted by the manufacturer. This RICE must be maintained and operated to meet the emissions limits in Specific Conditions **E.3. - E.5.** over the entire life of the engine. [40 CFR 60.4206 & 4211(a)]

E.8. Engine Certification Requirements. The owner or operator must comply with the emissions standards specified above by having purchased an engine certified by the manufacturer to meet those limits. The engine must have been installed and configured according to the manufacturer's emission-related specifications, except as permitted in Specific Condition **E.9.** [40 CFR 60.4211(c)]

E.9. Compliance Requirements Due to Loss of Certification. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written

instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. [40 CFR 60.4211(c) & (g)]

E.10. Testing Requirements. In the event performance tests are required pursuant to Specific Condition **E.9.**, the performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1039, Subpart F. Link to 40 CFR 1039, Subpart F. [40 CFR 60.4212(a) & (c)]

E.11. 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.]

Records and Reports

E.12. Testing Notification. At such time that the requirements of Specific Condition **E.9.** become applicable, the owner or operator shall notify the compliance authority of the date by which the initial compliance test must be performed. [Rule 62-213.440(1), F.A.C.]

E.13. Hours of Operation Records. The owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner 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(b)]

E.14. Maintenance Records. To demonstrate conformance with the manufacturer's written instructions for maintaining the certified engine and to document when compliance testing must be performed pursuant to Specific Conditions **E.9.** & **E.10,** the owner or operator must keep the following records:

a. Engine manufacturer data indicating compliance with the standards.
b. A copy of the manufacturer's written instructions for operation and maintenance of the certified engine.
c. A written maintenance log detailing the date and type of maintenance performed on the engine, as well as any deviations from the manufacturer's written instructions.

[Rule 62-213.440(1), F.A.C.; and, 40 CFR 60.4211(c) & (g)]

E.15. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

General Provisions

E.16. 40 CFR 60, Subpart A - General Provisions. The owner or operator shall comply with the applicable requirements of 40 CFR 60, Subpart A - General Provisions, as specified below.
Link to 40 CFR 60, Subpart A - General Provisions.

General Provisions Citation	Subject of Citation
§ 60.1	General applicability of the General Provisions
§ 60.2	Definitions (see also § 60.4219)
§ 60.3	Units and abbreviations
§ 60.4	Address
§ 60.5	Determination of construction or modification
§ 60.6	Review of plans
§ 60.8	Performance tests, except that § 60.8 only applies if the manufacturer's written instructions are not followed. (see Specific Conditions **E.9.** & **E.10.**)
§ 60.9	Availability of information
§ 60.10	State Authority
§ 60.12	Circumvention
§ 60.14	Modification

General Provisions Citation	Subject of Citation
§ 60.15	Reconstruction
§ 60.16	Priority list
§ 60.17	Incorporations by reference
§ 60.19	General notification and reporting requirements

[40 CFR 60.4218 and Table 8]

THE FOLLOWING SPECIFIC CONDITIONS APPLY TO ALL 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

E.17. 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

E.18. 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

E.19. 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.]

E.20. 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.]

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