Hillsborough County Public Works
Hillsborough County Resource Recovery Facility

Facility ID No. 0570261
Hillsborough County

Title V Air Operation Permit Renewal

Permit No. 0570261-020-AV
(Renewal of Title V Air Operation Permit No. 0570261-014-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

Telephone: (850) 717-9000
Email: DARM_Permitting@dep.state.fl.us

Compliance Authority:

Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, Florida 33637-0926

Telephone: (813) 470-5700
Email: SWD_Air@dep.state.fl.us

Title V Air Operation Permit Renewal

Permit No. 0570261-020-AV

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U.S. EPA e-mail dated January 22, 2009 regarding Testing Schedule for Fugitive Ash and HCl Emissions.

Florida Department of Environmental Protection

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

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Ryan E. Matthews
Interim Secretary

PERMITTEE:
Hillsborough County Public Works, Solid Waste Division
P.O. Box 1110
Tampa, Florida 33601

Permit No. 0570261-020-AV
Hillsborough County Resource Recovery Facility
Facility ID No. 0570261
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. The existing Hillsborough County Resource Recovery Facility is in Hillsborough County at 350 N Falkenburg Road, Tampa. UTM Coordinates are: Zone 17, 268.2 km East and 3092.7 km North. Latitude is: 27° 57' 14" North; and, Longitude is: 82° 20' 22" West.

The 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.

Executed in Tallahassee, Florida.

0570261-020-AV Effective Date: March 21, 2017
Renewal Application Due Date: August 8, 2021
Expiration Date: March 21, 2022

David Lyle Read, P.E.

David Lyle Read, P.E.
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For:

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

SA/dlr/sh

Subsection A. Facility Description.

The Hillsborough County Resource Recovery Facility consists of: four municipal waste combustors (MWC's) (Units 1, 2, 3 and 4) with auxiliary burners; lime storage and processing facilities; ash storage and processing facilities; cooling towers; a wastewater treatment plant and, ancillary support equipment. The facility is owned by Hillsborough County and is currently operated by Covanta Hillsborough, Inc., a subsidiary of Covanta Energy Corporation.

The total capacity of the Hillsborough County RRF is approximately 1,800 TPD (2,070 TPD maximum) of municipal solid waste (MSW). The gross nominal electric generating capacity of the facility is 47 megawatts (MW). Steam production from Units 1, 2 and 3 is limited to 102,000 pounds of per hour per unit (lb/hour/unit) and 200,000 lb/hour from Unit 4.

Units 1, 2 and 3 commenced operation in 1986. Unit 4 commenced operation in 2009. Emissions from each unit are controlled by:

- Good combustion practices (GCP) in the furnaces that minimize formation of carbon monoxide (CO), nitrogen oxide (NO_X) and particulate matter (PM);
- Ammonia or urea-based Selective Non-Catalytic Reduction (SNCR) systems in each furnace to further control NO_X emissions;
- Spray Dryer Absorbers (SDA), based on lime slurry injection, which absorbs and neutralizes MWC-acid gases including sulfur dioxide (SO_2) and hydrogen chloride (HCl) for subsequent capture as PM;
- Powered Activated Carbon Injection (ACI) systems to capture (adsorb) certain metals, such as mercury (Hg), and organic hazardous air pollutants (HAP) including dioxin and furan (dioxin/furan) for subsequent capture as PM; and
- Fabric filters (baghouses) to capture PM originating from combustion, the acid gas reactions and the spent activated carbon.

The facility is equipped with continuous emission monitoring systems (CEMS) for carbon monoxide (CO), SO_2 and NO_X and continuous opacity monitoring systems (COMS) for visible emissions (VE). The four MWC units exhaust to a common stack consisting of four separate flues.

This permit affects or includes the emissions units (E.U.) listed below that were constructed under the authority of Permit Nos. PSD-FL-104 and PSD-FL-121 (Units 1, 2 and 3) and PSD-FL-369 (Unit 4) issued in 1979, 1987 and 2006, respectively, and Florida Power Plant Site Certification PA 83-19 (as amended).

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
001	Municipal Waste Combustor Unit 1
002	Municipal Waste Combustor Unit 2
003	Municipal Waste Combustor Unit 3
107	Municipal Waste Combustor Unit 4
100	Ash Building and Handling System - Baghouse
112	Ash Building and Handling System - Wet Scrubber
101, 102, 108 & 110	Lime & Activated Carbon Storage Silos

113	Fire Pump (Diesel) - 235 HP
114	Emergency Generator - No. 1 at Falkenburg Advanced WWTP
115	Emergency Generator - No. 2 at Falkenburg Advanced WWTP
116	Emergency Generator - No. 3 at Falkenburg Advanced WWTP
117	Emergency Generator - No. 4 at Falkenburg Advanced WWTP
Unregulated Emissions Units	
103	Cooling Tower for MWC Units 1-3
104	Waste Water Treatment Plant
105	NaOH Storage Tank
111	Cooling Tower Cell for MWC Unit 4

Also included in this permit are miscellaneous insignificant emissions units and/or activities (see Appendix I, List of Insignificant Emissions Units and/or Activities).

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received September 21, 2016, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a prevention of significant deterioration (PSD) major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
Federal Rule Citations	
40 CFR 60, Subpart A, New Stationary Source Performance Standards (NSPS) General Provisions	001, 002, 003, 107, 100, 112, 115, 116 & 117
40 CFR 60, Subpart IIII, NSPS for Compression Ignition Internal Combustion Engines (CI-ICE)	115, 116, & 117
40 CFR 60, Subpart Eb, Standards of Performance for Large Municipal Waste Combustors	107, 100, & 112
40 CFR 61, Subpart A, General Provisions	001, 002, 003, & 107
40 CFR 61, Subpart E, National Emissions Standards for Mercury	
40 CFR 63, Subpart A, General Provisions	113 & 114
40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE)	
State Rule Citations	
Rule 62-204.800(9)(b), F.A.C., Emissions Guidelines and Compliance Times for Municipal Waste Combustors *{Permitting Note: Rule 62-204.800(9)(b), F.A.C. implements the Emissions Guidelines, 40 CFR 60, Subpart Cb}*	001, 002, & 003
Rules 62-210.300 and 62-213.400, F.A.C., Permits Required	001, 002, 003, 107, 100, 101, 102, 108, 110, & 112 – 117

Regulation	EU No(s).
Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD)	001, 002, 003, 107, 100, 101, 102, 108, 110, & 112
Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT)	
Rule 62-296.416, F.A.C., Waste-to-Energy Facilities	001, 002, 003, & 107
Rule 62-296.700, F.A.C., Reasonably Available Control Technology - Particulate Matter	001, 002, 003, & 107

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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. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

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

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. Emissions from the following types of activities in Hillsborough County are further subject to a general 5% opacity standard: loading or unloading of materials to or from containers such as rail cars, trucks, ships, storage structures and stockpiles; permanent conveyor systems; storage of materials in structures such as silos or enclosed bins, which have a storage capacity of fifty cubic yards or more; crushing, grinding, sizing and screening operations; and, static drop transfer points. These regulations do not impose a specific testing requirement. [Rules 62-296.320(4)(b)1, F.A.C. and Rule 1-3.52, HCEPC]

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

a. All roads shall be adequately paved, and vacuum swept if appropriate, to minimize accumulations of ash and dust.[1]
b. Parking areas and maintenance driveways shall be paved with asphalt or concrete.
c. A vacuum street sweeper shall be used to remove particulate matter from other paved areas on as-needed basis.
d. The unpaved areas of the facility are maintained with a vegetative cover (grass, ground cover, and plants) or mulch (wood chips and/or rocks).
e. The conveyor systems at the facility shall be enclosed or covered.
f. The ash is wetted before being stored in the ash handling building.
g. Ash and metal recovery processes, including storage and truck load out, are fully enclosed within the ash handling building.
h. Metal trucks shall be covered with tarps prior to shipping.
i. Watering of roads and haul routes for dust control is provided during any demolition, grading, construction and land clearing on as-needed basis.
j. Speed limit signs shall be posted.[1]
k. Unprocessed refuse storage areas which must be open for operational purposes (e.g., tipping floor or the refuse bunker while trucks are entering or leaving) shall be under negative pressure.[1]

{Permitting Note: Forced-draft fans draw air from the tipping building to provide combustion air to the boilers. The resulting air flow starts at the tipping building and travels across the refuse pit to the air intakes, capturing airborne particulate matter.}

[Rule 62-296.320(4)(c), F.A.C.; [1] Specific Condition D.4. of Permit No. 0570261-002-AC (PSD-FL-121C) and, Title V air operation permit renewal application received on September 21, 2016]

Reports and Fees

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

FW6. Electronic Annual Operating Report 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 1 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 Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 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, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) 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.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

FW7. 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 US. 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

FW8. Prevention of Accidental Releases (Section 112(r) of CAA). If, and when, the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent 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.

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

[40 CFR 68]

FW9. Semi-Annual Monitoring Reports. The permittee shall monitor compliance with the terms and conditions of this permit and shall submit reports of any deviations from the requirements of these conditions at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports, including reference to the specific requirement and the duration of such deviation. All reports shall be accompanied by a certification by a responsible official, pursuant to subsection 62-213.420(4), F.A.C. (See also Conditions RR2. – RR4. of Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements related to deviations.) [Rule 62-213.440(1)(b)3.a., F.A.C.]

{Permitting Note: EPA has clarified that, pursuant to 40 CFR 70.6(a)(3), the word "monitoring" is used in a broad sense and means monitoring (i.e., paying attention to) the compliance of the source with all emissions limitations, standards, and work practices specified in the permit.}

FW10. Submission of Reports. All reports shall be submitted to the Department's Compliance Authority listed on the cover page of this permit. However, if a condition contained within this permit (including the incorporated appendices listed in the Table of Contents) allows or requires the electronic submission of a report directly to the EPA using their Electronic Reporting Tool (ERT), that report does not also have to be submitted to the Compliance Authority, provided the permittee complies with all of the specific requirements of that condition and notifies the Compliance Authority in writing (email) on the same day that a report has been submitted to the ERT. See Appendix TR, Facility-wide Testing Requirements, for specific emission test report submission requirements. [Rules 62-4.130, 62-4.160, 62-213.440(1)(b) & 62-297.310(10), F.A.C.]

Other Requirements

FW11. 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 preclude the permittee from securing any other types of required permits, licenses, or certifications. [General Condition II.E.1. of Permit No. 0570261-002-AC (PSD-FL-121C)]

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Subsection A. Emissions Unit 001, 002 & 003
Municipal Waste Combustor Units 1, 2 & 3

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

EU No.	Brief Description
-001	Municipal Waste Combustor Unit 1
-002	Municipal Waste Combustor Unit 2
-003	Municipal Waste Combustor Unit 3

Emissions Unit ID Nos. 001, 002 and 003 are municipal solid waste (MSW) combustors designated as "Unit 1," "Unit 2" and "Unit 3," respectively. The units are identical in configuration. Each unit is a nominal 400 TPD (460 TPD maximum, based on a higher heating value of 4,500 Btu/lb) mass burn waterwall boiler which produces a maximum steam flow 102,000 pounds/hour based on a 4-hour block average. The units utilize German-based Martin GmbH combustion technology to combust MSW at furnace temperatures exceeding 1,800 degrees Fahrenheit (ºF) and reduce the MSW to an ash residue. Natural-gas fired auxiliary burners are used during startup, shutdown, and at other times when necessary and consistent with good combustion practices.

Each of the three municipal waste combustors (MWCs) has a nominal design rate capacity of 400 tons MSW per day, 150 million British thermal units per hour (MMBtu/hr) (excluding 9.9 MMBtu/hr from the combustion air preheaters) and 94,270 lbs steam/hour with MSW having a heating value of 4,500 Btu/lb. The "operating window" of 115 percent (%) over the nominal design rate of 150 MMBtu/hr heat input corresponds to 172.5 MMBtu/hr heat input and 102,000 lbs steam/hour per each boiler. By letter dated March 17, 1998, D.B Riley, Inc. (the boilers' manufacturer) indicated that it performed an evaluation of each boiler's ability to operate at the proposed increase steam flow of 102,000 lbs steam/hr and concluded that each boiler can safely operate at an increased continuous steam generation rate of 103,700 lbs steam/hr. Short-term capacity is limited by limiting steam production (102,000 lbs steam/hr), which effectively limits heat input. The net design steam enthalpy for useful work is 1,158 Btu/lb (1,378.86 Btu/lb steam enthalpy - 220 Btu/lb feed water enthalpy). Units 1, 2 and 3 share a common steam turbine-generator rated at an electrical output of 29 megawatts (MW).

Odor is controlled by drawing combustion air from the refuse tipping floor area. Emissions of nitrogen oxides (NO_X) are controlled by Selective Non-Catalytic Reduction (SNCR) by injecting urea or ammonia into the boiler exhaust gases. MWC acid gases and particulate matter are controlled by Spray Dryer Absorbers (SDA) followed by Fabric Filter Baghouses (FF). Mercury (Hg) and MWC organics are controlled by Activated Carbon Injection (ACI) systems prior to the baghouses. Captured fly ash particles fall into hoppers and are transported by an enclosed conveyor system to the bottom ash discharger where they are mixed with the bottom ash and wetted to prevent fugitive dust. Emissions of carbon monoxide (CO) and volatile organic compounds (VOC) are controlled by good combustion practices.

Each MWC unit has a nominal exhaust flow rate of 53,189 dry standard cubic feet per minute exhausting out a 5.4 foot diameter, 220 foot tall stack at approximately 290 degrees Fahrenheit. Each MWC unit has its own flue within the combined stack. Units 1, 2, and 3 commenced operation in 1986 and are equipped with CEMS for CO, NO_X, and SO_2; and COMS for opacity.

{Permitting notes: 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; 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-121, as amended]; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); and, Florida Electrical Power Plant Site Certifications [PA 83-19]}

Essential Potential to Emit (PTE) Parameters

A.1. Name Plate. The combustors (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. [Rules 62-4.160(2) and 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.; and, Specific Condition B.1. of Permit No. 0570261-002-AC (PSD-FL-121C)]

A.2. Boiler Stack Height. The height of the boiler exhaust stacks shall not be less than 220 feet above grade. [Rule 62-4.160(2), F.A.C.; and, Specific Condition B.5. of Permit No. 0570261-002-AC (PSD-FL-121C)]

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 (PTE), F.A.C.; and, Permit No. 0570261-002-AC (PSD-FL-121C)]

A.4. Capacity. The maximum operating rate applicable to each of MWC Units 1, 2 and 3 measured as steam flow shall not exceed 102,000 pounds/hour based on 4-hour block averaged measurements **and** shall not exceed the "maximum demonstrated MWC unit load" defined as 110% of the highest 4-hour average MWC unit load achieved during 4 consecutive hours during the most recent dioxin/furan performance test.

{Permitting note: The nominal design rate capacity of each MWC Units 1, 2 and 3 is 400 tons/day and has been determined to be greater than 250 tons per day, thus classifying the units as a "large MWC units" under NSPS - 40 CFR 60, Subpart Eb.}

[Rules 62-4.160(2) and 62-210.200 (PTE), F.A.C.; 40 CFR 60.31b & 40 CFR 60.58b(j);. and Specific Condition 6. of Permit No. 0570261-016-AC (PSD-FL-121E and PSD-FL-369D)]

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), 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 as an auxiliary fuel. Other fuels or wastes, not specifically listed herein, shall not be burned without written prior approval from the Department. Fuels or wastes specifically authorized herein do not require prior Department approval prior to 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).
   (3) Sewage sludge may be utilized as a fuel after dewatering, as biosolids (containing at least 12% solids by weight).

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) Grease, scum and grit screenings;
      (h) Explosives;

(i) beryllium-containing waste, as defined in 40 CFR 61, Subpart C. *{The U.S. EPA letter dated April 6, 2000 (see attached), on 40 CFR 61, Subpart C further addresses the applicability of this federal regulation with regard to beryllium-containing waste(s).}*

(2) And shall not knowingly burn:

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

(b) Segregated loads of biological waste;

c. *Fuel Handling.* The fuel may be received either as a mixture or as a single-item stream (segregated load) of discarded materials. If the facility intends to use an authorized fuel that is segregated non-MSW material, the fuel shall be either:

(1) Well mixed with MSW in the refuse pit; 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 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined on a calendar month basis.

f. *Non-MSW Material.* Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (i.e., the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as segregated loads and burned at the facility shall not exceed 5%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined on a calendar month basis.

(1) Construction and demolition debris.

(2) Oil spill debris from aquatic, coastal, estuarine or river environments. Such items or materials include but are not limited to rags, wipes, and absorbents.

(3) Items suitable for human, plant or domesticated animal use, consumption or application where the item's shelf-life has expired or the generator wishes to remove the items from the market. Such items or materials include but are not limited to off-specification or expired consumer products, pharmaceuticals, medications, health and personal care products, cosmetics, foodstuffs, nutritional supplements, returned goods, and controlled substances.

(4) Consumer-packaged products intended for human or domesticated animal use or application but not consumption. Such items or materials include but are not limited to carpet cleaners, household or bathroom cleaners, polishes, waxes and detergents.
(5) Waste materials that:
  (a) Are generated in the manufacture of items in categories f.(3) or f.(4), above and are functionally or commercially useless (expired, rejected or spent); or
  (b) Are not yet formed or packaged for commercial distribution. Such items or materials must be substantially similar to other items or materials routinely found in MSW.
(6) Waste materials that contain oil from:
  (a) The routine cleanup of industrial or commercial establishments and machinery; or
  (b) Spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.
(7) Used oil and used oil filters. Used oil containing a polychlorinated biphenyls (PCB) concentration equal or greater than 50 parts per million (ppm) shall not be burned, pursuant to the limitations of 40 CFR 761.20(e).
(8) Waste materials generated by manufacturing, industrial or agricultural activities, provided that these items or materials are substantially similar to items or materials that are found routinely in MSW, subject to written prior approval of the Department.

[Rules 62-4.070(1) & (3), 62-213.410 and 62-213.440, F.A.C.; Specific Condition B.6. of Permit No. 0570261-002-AC (PSD-FL-121C) and Specific Condition 4. of Permit No. 0570261-016-AC (PSD-FL-121E and PSD-FL-369D)]

A.7. Limitation of Biosolids. The owner or operator is authorized to combust up to 5% by weight (90 wet tons per day, as received) of biosolids that contain at least 12% solids, by weight, in MWC Units 1, 2, 3 and 4 combined. [Specific Condition 5. of Permit No. 0570261-016-AC (PSD-FL-121E and PSD-FL-369D)]

A.8. Auxiliary Burners - Methods of Operation - Fuels. Auxiliary burners for each unit shall be fired only by natural gas. During boiler startup, the auxiliary burners shall be operating at their maximum capacity prior to the introduction of municipal solid waste to the boilers, and shall remain in operation until the lime spray dryer absorber (SDA) and particulate matter control device (baghouse) are fully operational. [Rules 62-4.160(2), 62-210.200 (PTE), and 62-213.440(1), F.A.C.; and, Specific Condition B.17. of Permit No. 0570261-002-AC (PSD-FL-121C)]

Air Pollution Control Technologies and Measures

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. Air Pollutant Emission Control Equipment.
a. *Baghouse.* Each unit's particulate matter control baghouse shall be designed, constructed and operated to not exceed a maximum emission rate of 25 mg/dscm corrected to 7 percent O_2. The baghouses shall be equipped with pressure drop monitoring equipment.
b. *Spray Dryer Scrubber.* Each unit's spray dryer scrubber shall be designed, constructed and operated to remove SO_2 at an efficiency of at least 75 percent, or to not exceed a maximum emission rate of 29 parts per million by volume, dry basis (ppmvd) corrected to 7 percent O_2, 24-hour block geometric mean, whichever is less stringent.
c. *Activated Carbon Injection.* Each unit shall operate and maintain an activated carbon injection system. The activated carbon injection rate shall be measured 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.* Each unit's selective non-catalytic reduction (SNCR) system shall be designed, constructed and operated so as not to exceed a maximum NO_X emission rate of 205 ppmvd corrected to 7 percent O_2 on a 24-hour block arithmetic mean (midnight to midnight).

[Specific Condition B.4. of Permit No. 0570261-002-AC (PSD-FL-121C); Rules 62-204.800(9)(b) and 62-4.070(1) & (3), F.A.C.]

A.11. Operation and Maintenance (O&M) Plans. An O&M plan shall be on file with the Compliance Authority for each MWC unit and associated air pollution control devices. These emissions units and associated air pollution control devices shall be operated and maintained in accordance with the submitted O&M plans. The O&M documentation logs shall be maintained for a minimum of the most recent five years and be made available for inspection upon request. [Rules 62-296.700(6), 62-213.440(1), 62-213.440(1)(b)2.b. 62-212.400, & 62-4.070(3), F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions **A.12. - A.21.** are based on the specified averaging time of the applicable test method.

Steady-State Emissions Standards

A.12. Particulate Matter. The emission limit for particulate matter (PM) contained in the gases discharged to the atmosphere is 25 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, Specific Condition B.8. of Permit No. 0570261-002-AC (PSD-FL-121C)]

A.13. 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, Specific Condition B.8. of Permit No. 0570261-002-AC (PSD-FL-121C)]

A.14. 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.; 40 CFR 60.33b(a)(2)(i).; and, Specific Condition B.8. of Permit No. 0570261-002-AC (PSD-FL-121C)]

A.15. Mercury. 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. In addition, mercury emissions from MWC Units 1, 2, 3 and 4 combined shall not exceed 7.1 pounds per 24-hour period when combusting sewage sludge biosolids. [Rule 62-204.800(9)(b)3.d., F.A.C.; 40 CFR 60.33b(a)(3); 40 CFR 61.52(b); Specific Condition B.8. of Permit No. 0570261-002-AC (PSD-FL-121C) and Specific Condition 7. of Permit No. 0570261-016-AC (PSD-FL-121E and PSD-FL-369D)]

A.16. Lead. 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, Specific Condition B.8. of Permit No. 0570261-002-AC (PSD-FL-121C)]

A.17. Sulfur Dioxide. As determined by the continuous emissions monitoring system (CEMS), the emission limit for sulfur dioxide (SO_2) contained in the gases discharged to the atmosphere is 29 ppmvd or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen, 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, Specific Condition B.8. of Permit No. 0570261-002-AC (PSD-FL-121C)]

A.18. Hydrogen Chloride. The emission limit for hydrogen chloride (HCl) contained in the gases discharged to the atmosphere is 29 ppmvd or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen, whichever is less stringent. [Rule 62-204.800(9)(b)3.f., F.A.C.; 40 CFR 60.33b(b)(3)(ii); and, Specific Condition B.8. of Permit No. 0570261-002-AC (PSD-FL-121C)]

A.19. Dioxin/Furan. The emission limit for dioxin/furan (D/F) contained in the gases discharged to the atmosphere from designated facilities that do not employ an electrostatic precipitator-based emission control system is 30 nanograms per dry standard cubic meter (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, Specific Condition B.8. of Permit No. 0570261-002-AC (PSD-FL-121C)]

A.20. Nitrogen Oxides. As determined by the CEMS, the emission limit for nitrogen oxides (NO_X) contained in the gases discharged to the atmosphere is 205 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, Specific Condition B.8. of Permit No. 0570261-002-AC (PSD-FL-121C)]

A.21. Carbon Monoxide. 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 is 100 ppmvd, corrected to 7 percent oxygen, and calculated on a 4-hour block average. [Rule 62-204.800(9)(b)3.i., F.A.C.; 40 CFR 60.34b(a); and, Specific Condition B.8. of Permit No. 0570261-002-AC (PSD-FL-121C)]

Emissions Limits During Startup and Shutdown

A.22. Startup and Shutdown Emissions. After May 22, 2018, each unit shall not exceed the following emissions limits, without oxygen correction, during each startup and shutdown event:

a. *Carbon Monoxide:* 100 ppmvd based on a 24-hour block average;

b. *Sulfur Dioxide:* 29 ppmvd based on a 24-hour geometric average;

c. *Nitrogen Oxides:* 205 ppmvd based on a 24-hour block average; and,

d. *Opacity:* 10 percent based on a 6-minute block average

For the purposes of this condition, startup begins with the first firing of auxiliary fuel after a shutdown for the purpose of supplying useful thermal energy, continues through the initial combustion of MSW, and ends when 24 hours of continuous emission monitoring data have been collected. In addition, for the purposes of this condition, shutdown commences 24 hours prior to when the operator has secured the municipal waste combustor unit offline, there is no combustion of MSW or auxiliary fuel taking place, and the system has been purged of all MSW combustion products.

{Permitting Note: The startup period for the purposes of excluding data from compliance calculations with respect to the steady-state emission limits pursuant to 40 CFR 60, Subpart Cb commences when the MWC unit begins the continuous burning of MSW and does not include any warmup period when the affected facility is combusting auxiliary fuel or other non-MSW fuel, and no MSW is being fed to the combustor. Shutdown, for the purposes of excluding data from compliance calculations with respect to the steady-state emission limits pursuant to 40 CFR 60, Subpart Cb, is defined as the cessation of operation of an affected unit for any purpose, i.e., when the feed chute damper to the MWC unit has been secured closed.}

[Rule 62-210.710, F.A.C.; Applicant Request; and, Permit No. 0570261-019-AC (PSD-FL-121F and 369F)]

Work Practices During Startup, Shutdown, and Malfunction

A.23. Work Practice Standards. The permittee shall utilize best practices to minimize the extent and duration of emissions to the greatest extent practicable during periods of startup, shutdown, and malfunction. Best practices shall include, but are not limited to, the following:

a. All CEMS and COMS shall be operated during all periods of startup, shutdown, and malfunction. [40 CFR 60, Subpart Cb and 40 CFR 60.59b(d)(7)]

b. Good combustion practices, including the use of the natural gas-fired auxiliary burners and excess air when needed, shall be utilized to minimize emissions during routine startup and shutdown periods. Good combustion practices shall be utilized to the extent practicable during periods of malfunction.

c. All air pollution control equipment shall be in operation during all periods of waste firing, including startup, shutdown, and MWC unit malfunction.

d. All deviations from the numerical emission limits in **Specific Condition A.22.**, and a description of any startup, shutdown, or malfunction periods during which a CEMS or COMS is not in compliance with **Specific Condition A.23.a.**, shall be included in the Semi-Annual Monitoring Report (See **Specific Condition A.42.**) [Rule 62-213.440(1)(b)3.a., F.A.C.]

[Rule 62-210.710, F.A.C.; Applicant Request; and, Permit No. 0570261-019-AC (PSD-FL-121F and 369F)]

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. The following conditions apply only to the emissions limits that were specified pursuant to BACT or to avoid PSD applicability.

a. Prior to May 23, 2018, excess emissions resulting from warmup, startup, shutdown or malfunction shall be permitted providing (1) best 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. The duration of warmup periods is not limited. A malfunction means any unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner.

b. The permittee shall notify the Compliance Authority within one working day of discovering any emissions in excess of a CEMS standard subject to the specified averaging period. All such reasonably preventable emissions shall be included in any CEMS compliance determinations. All valid emissions data (including data collected during startup, shutdown and malfunction) shall be used to report emissions for the Annual Operating Report.

[Rules 62-210.700 and 62-4.130, F.A.C.; and, Specific Condition B.7. of Permit No. 0570261-002-AC (PSD-FL-121C)]

A.25. EG 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)]

A.26. Best Practices. The owner or operator shall maintain a manual that identifies and describes best practices that will be used during periods of startup, shut down, and malfunction at this facility. [Specific Condition D.3.(c) of Permit No. 0570261-002-AC (PSD-FL-121C)]

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(1), F.A.C. and Specific Condition B.7. of Permit No. 0570261-002-AC (PSD-FL-121C)]

Continuous Monitoring Requirements

{Permitting Note: The following continuous monitors are installed on these emissions units: steam flow, inlet temperature to baghouse, opacity, SO_2, NO_X, 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 baghouses shall be equipped with pressure drop monitoring equipment. [Specific Condition B.4. of Permit No. 0570261-002-AC (PSD-FL-121C)]

A.31. Continuous Emissions Monitoring Systems (CEMS) Required. The owner or operator shall calibrate, operate and maintain continuous emissions monitoring systems (CEMS) for monitoring sulfur dioxide (SO_2), nitrogen oxides (NO_X) and carbon monoxide (CO), and continuous opacity monitoring systems (COMS) for opacity. [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) (NO_X) & 40 CFR 60.58b(i)(3) (CO); and Specific Condition B.12. & B.18. of Permit No. 0570261-002-AC (PSD-FL-121C)]

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 Specific Condition B.18. of Permit No. 0570261-002-AC (PSD-FL-121C)]

A.33. Additional Continuous Monitoring System (CMS). CMS with recorders shall be installed, calibrated, maintained and operated for each unit, subject to review by the Department, for the following operational parameters:

Power Generation (MW); and,
Carbon Injection System Operating Parameters.

Unless required in Rule 62-204.800(9)(b), F.A.C. (40 CFR 60, Subpart Cb), operational data monitoring systems shall be calibrated annually and operated in accordance with good engineering practice. [Rule 62-213.440, F.A.C.; and Specific Condition B.18. of Permit No. 0570261-002-AC (PSD-FL-121C)]

Monitoring Requirements

A.34. 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. [Specific Condition B.14. of Permit No. 0570261-002-AC (PSD-FL-121C); and, Rule 62-4.070(1) & (3), F.A.C.]

Test Methods and Procedures

A.35. 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	Methods for Determining PM 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 NO_X Emissions (7E is Instrumental).
EPA Method 9 or COMS[1]	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 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. Authorized to use large impingers in lieu of midget impingers and an empty chilled impinger in lieu of two NaOH impingers.[3]
EPA Method 29	Determination of Metal (e.g., Cd, Hg and Pb) Emissions from Stationary Sources.

The above methods are described in Chapter 62-297, F.A.C. and/or 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C.; Rule 62-204.800(9)(b)7., F.A.C.; [1] Authorized to use COMS data during annual particulate matter compliance test in lieu of EPA Method 9 pursuant to 60.11(e)(5); [2]Appendix ATP, U.S. EPA Alternative Test Procedure Approval dated June 3, 2004.; and, [3] Appendix ASP, Alternate Sampling Procedure No. 15-N-AP dated April 30, 2015]

A.36. 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.37. Annual Compliance Test. The owner or operator shall conduct a performance test for PM, HCl, opacity, Cd, Hg, Pb and D/F emissions on a calendar year basis (no less than 9 calendar months and no more than 15 calendar months following the previous performance test) and must complete five performance tests in each 5-year calendar period. [Rules 62-297.310(8) & 62-204.800(9)(b)7., F.A.C.; and Specific Condition B.9. of Permit No. 0570261-002-AC (PSD-FL-121C); and, Permit No. 0570261-019-AC (PSD-FL-121F & 369F)]

A.38. 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.39. VE Testing Conditions. The 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 the annual particulate matter performance tests required in lieu of EPA Method 9 observation data. If the owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Department of that decision, in writing, at least 30 days before the annual particulate matter performance test is conducted. Once the owner or operator of an affected facility has notified the Department to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests until the owner or operator notifies the Department, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during the annual particulate matter performance test using COMS data, the minimum total time of COMS data collection shall be 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 particulate matter performance test. 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), 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 EPA 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); and, Specific Condition B.10. of Permit No. 0570261-002-AC (PSD-FL-121C) and Permit No. 0570261-019-AC (PSD-FL-121F and 369F)]

A.40. PM Testing Conditions. Testing of the MWC units for particulate matter emissions shall be performed during normal operation and at least one 1-hour PM test run shall be conducted during soot blowing conditions. [Specific Condition B.10. of Permit No. 0570261-002-AC (PSD-FL-121C)]

A.41. Continuous Compliance. The permittee shall demonstrate continuous compliance with the CO, NO_X, and SO_2 emissions standards based on data collected by the certified CEMS. The permittee shall demonstrate continuous compliance with the opacity limit based on data collected by the required COMS. [Rule 62-212.400, F.A.C., and Specific Condition B.12. and B.18. of Permit No. 0570261-002-AC (PSD-FL-121C)]

Recordkeeping and Reporting Requirements

A.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 (quarterly)	**A.43.**
Quarterly Excess Emissions	Every 3 months (quarterly)	**A.44.**

Excess Emissions and Monitoring System Performance	Every 6 months (semi-annual), except when more frequent reporting is specifically required	**A.55.** 40 CFR 60.7(c)
EG Cb (Eb) Semi-Annual Report	Every 6 months (semi-annual)	**A.53.** & **A.54.** 40 CFR 60.59b(g)&(h)[1]

[1]The semi-annual reports required under 60.59b(g) or (h) shall include the fugitive ash emissions levels during the annual Method 22 performance test conducted to demonstrate compliance with **Specific Condition C.8.**

[Rule 62-210.700(5), F.A.C.; 40 CFR 60, Subparts A, Cb & Eb.]

A.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(5), F.A.C.]

A.44. 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. [Specific Condition B.21. of Permit No. 0570261-002-AC (PSD-FL-121C)]

A.45. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

A.46. 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.47. 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.** and **A.6.f.**). The following records shall be prepared and maintained to demonstrate compliance with the segregated non-MSW percentage limitations:

a. *Segregated Loads of non-MSW Materials*. Each segregated load of non-MSW materials, that is subject to the percentage weight limitations (see Specific Conditions **A.6.e.** and **A.6.f.**), which is received for processing shall be documented as to the description and weight of the waste. The weight of all waste materials received for processing shall be measured using the facility truck scale and recorded.

b. *Waste Tires*. Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of tires shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation. [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] Specific Condition B.25. of Permit No. 0570261-002-AC (PSD-FL-121C)]

A.48. Central File. The permittee shall maintain a central file containing all measurements, records, and other data that are required to be collected pursuant to the various specific conditions of this permit. This file shall include but not be limited to:

a. Data collected from monitoring instruments, including CEMS/COMS, steam or feed water flow measurements and PM control device temperatures.
b. Continuous steam flow or feed water flow records on 4-hour block average basis.
c. Records on daily solid waste charging rates and hours of operation derived from monthly truck scale data, refuse pit inventory, and operational records.
d. Results of all source tests or performance tests; and records of the maximum demonstrated unit load specified by this permit.
e. Amounts of activated carbon used for mercury control.
f. Calibration logs for all instruments subject to this permit.
g. Maintenance/repair logs for any work performed which is subject to this permit.
h. Records showing the names of facility personnel who have been provisionally or fully certified, and who have completed the MWC operator training course, and who have completed reviews of the operating manual, including the dates and documentation of certification/review.
i. Records demonstrating compliance with the percentage limitations on segregated solid wastes required by this permit.

[Specific Condition B.20. of Permit No. 0570261-002-AC (PSD-FL-121C)]

Operator Practices, Training and Certification

A.49. 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.50. 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.51. Best Management Practices (BMP's) for Biosolids Utilization. To ensure good mixing of biosolids with other waste processed in MWC Units 1, 2, 3 and 4, the owner or operator shall document and employ best management practices (BMP's) when utilizing biosolids (dewatered sewage sludge) and include the following minimum requirements:

a. The BMP's shall be incorporated into the site-specific municipal waste combustor operator training and certification pursuant to Department's MWC Rule and 40 CFR 60.54b, Standards for Municipal Waste Combustor Operator Training and Certification.
b. The BMP's shall provide for operator training and identify and implement practices that promote good mixing and combustion.
c. All mixing shall occur in a waste storage bunker or refuse pit. Biosolids shall not be placed on the tipping floor, or alone, in a waste storage bunker.
d. The operator shall evenly spread biosolids with the crane grapple(s) over the top of the MSW in the waste storage bunker. Other MSW may be spread over the top of the biosolids.
e. Well-mixed (combined) materials shall be fed directly into the combustor feed hopper.

f. The owner or operator shall maintain records including the source, classification and typical characteristics (e.g. metals, pathogen results, solids) and amount introduced into the process.

[Rules 62-4.070(1) & (3) and Rule 62-204.800(9)(b), F.A.C.; and Specific Condition 11. of Permit No. 0570261-016-AC (PSD-FL-121E and PSD-FL-369D)]

EG 40 CFR 60 Requirements

A.52. EG Requirements - General Applicability and Definitions. These emissions units shall comply with all applicable requirements of Rule 62-204.800(9), F.A.C., which implements 40 CFR 60, Emission Guidelines and Compliance Times, except that the term "Administrator," when used in any provision of 40 CFR 60 that is delegated to the Department by the U.S. Environmental Protection Agency, shall mean the Secretary or the Secretary's designee. [Rule 62-204.800(9)(a), F.A.C.]

A.53. EG Requirements - Subpart Cb. These emissions units shall comply with all applicable requirements of 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. [Rule 62-204.800(9)(b), F.A.C.]

NSPS 40 CFR 60 Requirements

{Permitting note(s): Rule 62-204.800(9)(b) cross references applicable requirements that are contained in the NSPS 40 CFR 60, Subparts A and Eb.}

A.54. NSPS Requirements - Subpart Eb. Except as otherwise provided in this permit, these emissions units shall comply with the applicable provisions of 40 CFR 60, Subpart Eb, Large Municipal Waste Combustors, adopted and incorporated by reference in Rule 62-204.800(8)(b), F.A.C.; except that the Secretary is not the Administrator for purposes of the authorities cited at 40 CFR 60.50b(n). These emissions units shall comply with all applicable provisions of Appendix 40 CFR 60 Subpart Eb included with this permit. [Rule 62-204.800(8)(b)7., F.A.C.]

A.55. NSPS Requirements - Subpart A. This emissions unit shall comply with the applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:
40 CFR 60.7, Notification and Recordkeeping
40 CFR 60.8, Performance Tests
40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting Requirements, which have been adopted by reference in Rule 62-204.800(8)(d), F.A.C.; except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. This emissions unit shall comply with all applicable provisions of Appendix 40 CFR 60 Subpart A included with this permit. [Rule 62-204.800(8)(d), F.A.C.]

Other Requirements

A.56. 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)(h), F.A.C.]

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Subsection B. Emissions Unit 107
Municipal Waste Combustor Unit 4

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

EU No.	Brief Description
-107	Municipal Waste Combustor Unit 4

Unit 4 consists of a nominal design rated capacity 600 TPD (690 TPD maximum, based on a higher heating value of 5,000 Btu/lb) mass burn waterwall municipal waste combustor (MWC) manufactured by Riley Power Inc. Unit 4 has two nominal 50 MMBtu/hr natural gas-fired auxiliary burners. The combustion system technology is similar to Units 1, 2, and 3 where combustion takes place on a reverse-reciprocating grate system. The combustion system incorporates the technology of German-based Martin GmbH. Waste is combusted at furnace temperatures exceeding 1,800 ºF, and is reduced to an inert ash residue. The auxiliary burners are used to fire the MSW combustors during warmup, startup, shutdown, and at other times when necessary and consistent with good combustion practices. The maximum steam production rate for Unit 4 is 200,000 lbs steam/hr (4-hour block average).

The nominal steam production rate is 170,790 lbs steam/hour and the maximum steam production limit is 200,000 lbs steam/hr (4-hour block average) based on MSW having a higher heating value of 5,000 Btu/lb. The maximum heat input is approximately 288 MMBtu/hr. Short term capacity is restricted by limiting steam production, which effectively limits heat input. The net design steam enthalpy for useful work is 1,158 Btu/lb. Unit 4 is directly connected to a separate dedicated steam turbine-generator with an electrical output of 17 MW.

Odor is controlled by drawing combustion air from the refuse tipping floor area. Air pollution control equipment and measures consist of: efficient combustion on the grate and furnace; the strategic combustion air management system (Covanta low NO_X (LN^{TM}) system) or flue gas recirculation (FGR); a spray dryer absorber (SDA) in conjunction with a fabric filter (baghouse) for control of acid gases, particulate matter, and most metals; activated carbon injection (ACI) system to enhance mercury (Hg) removal; and, selective non-catalytic reduction (SNCR) by ammonia or urea injection for nitrogen oxides (NO_X) control. Activated carbon is injected into the flue gases prior to the baghouses to control Hg emissions. Captured fly ash particles fall into hoppers and are transported by an enclosed conveyor system to the bottom ash discharger where they are mixed with the bottom ash and wetted to prevent fugitive dust. Emissions of carbon monoxide (CO) and volatile organic compounds (VOC) are controlled by good combustion practices.

All four units, Units 1, 2, 3 (see **Subsection A.**) and 4, exhaust to a common stack consisting of four separate flues. The stack parameters for Unit 4's flue are: height, 220 feet; diameter, 7.4 feet; exit temperature, 270 ºF; and, stack gas flow rate, 81,744 dscfm. This emissions unit is equipped with CEMS for CO, NO_X, and SO_2; and COMS for opacity.

Unit 4 commenced operation in August 2009.

{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. Unit 4 is considered a 'new' large municipal waste combustor (large MWC) unit regulated under 40 CFR 60, Subpart Eb. This MWC unit commenced construction on December 26, 2006 (the cut-off date for lower emission standards/limitations under 40 CFR 60, Subpart Eb is a "commenced construction date after December 19, 2005"); 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-369, as amended]; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); and, Florida Electrical Power Plant Site Certifications [PA82-19A].}

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, waste type, and rated capacity. [Rules 62-4.160(2) and 62-210.200 (Definitions - Potential to Emit (PTE)), F.A.C.; and, Permit No. 0570261-007-AC (PSD-FL-369)]

B.2. Combustion Practices. To ensure that the facility's fuel does not adversely affect the facility's combustion process or emissions, the facility operator shall:

a. Comply with good combustion operating practices in accordance with 40 CFR 60.53b;
b. Install, operate and maintain continuous emissions monitors (CEMS) for oxygen, carbon monoxide, sulfur dioxide, oxides of nitrogen and temperature in accordance with 40 CFR 60.58b; and
c. Record and maintain the CEMS data in accordance with 40 CFR 60.59b.

These steps shall be used to ensure and verify continuous compliance with the emissions limitations in this permit. Natural gas may be used as fuel during warm-up, startup, shutdown, and malfunction periods, and at other times when necessary and consistent with good combustion practices.
[Rule 62-4.070(1) & (3), F.A.C.; and, Permit No. 0570261-007-AC (PSD-FL-369)]

Essential Potential to Emit (PTE) Parameters

B.3. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Rule 62-210.200 (PTE), F.A.C.; and, Permit No. 0570261-007-AC (PSD-FL-369)]

B.4. Capacity. The maximum operating rate measured as steam flow shall not exceed 200,000 pounds per hour based on 4-hour block averaged measurements **and** shall not exceed the "maximum demonstrated MWC unit load" defined as 110% of the highest 4-hour average MWC unit load achieved during 4 consecutive hours during the most recent dioxin/furan performance test.

{Permitting note: The nominal capacity of Unit 4 is 600 tons per day and has been determined to be greater than 250 tons per day, thus classifying the unit as a "large MWC unit" under NSPS - 40 CFR 60, Subpart Eb.} [Rules 62-4.160(2) and 62-210.200 (PTE), F.A.C.; 40 CFR 60.58b(j); 40 CFR 60, Subpart Eb; Design; and, Permit Nos. 0570261-007-AC (PSD-FL-369) & 0570261-009-AC (PSD-FL-369A)]

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

B.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 as an auxiliary fuel. Other fuels or wastes, not specifically listed herein, shall not be burned without written prior approval from the Department. Fuels or wastes specifically authorized herein do not require prior Department approval before combustion.
   (2) The primary fuel for the facility is 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).
   (3) Sewage sludge may be utilized as a fuel after dewatering, as biosolids (containing at least 12% solids by weight).

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. *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 in the refuse pit; 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 3%, by weight, of the facility's total fuel. [1] Compliance with this limitation shall be determined on a calendar month basis.

f. *Non-MSW Material.* Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (i.e., the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as segregated loads and burned at the facility shall not exceed 5%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined on a calendar month basis.

(1) Construction and demolition debris.

(2) Oil spill debris from aquatic, coastal, estuarine or river environments. Such items or materials include but are not limited to rags, wipes, and absorbents.

(3) Items suitable for human, plant or domesticated animal use, consumption or application where the item's shelf-life has expired or the generator wishes to remove the items from the market. Such items or materials include but are not limited to off-specification or expired consumer products, pharmaceuticals, medications, health and personal care products, cosmetics, foodstuffs, nutritional supplements, returned goods, and controlled substances.

(4) Consumer-packaged products intended for human or domesticated animal use or application but not consumption. Such items or materials include but are not limited to carpet cleaners, household or bathroom cleaners, polishes, waxes and detergents.
(5) Waste materials that:
  (a) Are generated in the manufacture of items in categories f.(3) or f.(4), above and are functionally or commercially useless (expired, rejected or spent); or
  (b) Are not yet formed or packaged for commercial distribution. Such items or materials must be substantially similar to other items or materials routinely found in MSW.
(6) Waste materials that contain oil from:
  (a) The routine cleanup of industrial or commercial establishments and machinery; or
  (b) Spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.
(7) Used oil and used oil filters. Used oil containing a polychlorinated biphenyls (PCB) concentration equal or greater than 50 parts per million (ppm) shall not be burned, pursuant to the limitations of 40 CFR 761.20(e).
(8) Waste materials generated by manufacturing, industrial or agricultural activities, provided that these items or materials are substantially similar to items or materials that are found routinely in MSW, subject to written prior approval of the Department.

[Rules 62-4.070(1)& (3), 62-213.410 and 62-213.440, F.A.C.; Permit No. 0570261-007-AC (PSD-FL-369) and Specific Condition 4. of Permit No. 0570261-016-AC (PSD-FL-121E and PSD-FL-369D)]

B.7. Limitation of Biosolids. The owner or operator is authorized to combust up to 5% by weight (90 wet tons per day, as received) of biosolids that contain at least 12% solids, by weight, in MWC Units 1, 2, 3 and 4 combined. [Specific Condition 5. of Permit No. 0570261-016-AC (PSD-FL-121E and PSD-FL-369D)]

Air Pollution Control Technologies and Measures

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

B.9. Air Pollution Control Equipment. The owner or operator shall operate and maintain the following air pollution control equipment consistent with the manufacturers' specifications.

e. *Particulate Matter (PM/PM_{10}).* A fabric filter (FF) baghouse, including absorption/adsorption reagent, shall be installed to remove particulate matter.
f. *MWC Acid Gas Control.* A spray dryer absorber (SDA) with lime injection shall be installed to absorb MWC acid gases.
g. *NO_X Controls.* A strategic combustion air management system (Covanta low NO_X (LN^{TM}) system) or flue gas recirculation system (FGR) shall be used to limit NO_X formation. An ammonia or urea-based selective non-catalytic reduction (SNCR) system shall be employed for the control of NO_X.
h. *MWC Organics and Mercury (Hg).* An activated carbon injection (ACI) system shall be installed to adsorb MWC organics and Hg.

[Permit No. 0570261-007-AC (PSD-FL-369) and Rule 62-4.070(1) & (3), F.A.C.]

B.10. Operation and Maintenance (O&M) Plans. An O&M plan shall be on file with the Compliance Authority for each MWC unit and associated air pollution control devices. These emissions units and associated air pollution control devices shall be operated and maintained in accordance with the submitted O&M plans. The O&M documentation logs shall be maintained for a minimum of the most recent five years and be made available for inspection upon request. [Rules 62-296.700(6), 62-296.700(6), 62-213.440(1), 62-213.440(1)(b)2.b. 62-212.400, & 62-4.070(3), F.A.C.]

Subsection B. Emissions Unit 107
Municipal Waste Combustor Unit 4

Emission Limitations and Standards

{Permitting note: MWC Unit 4 was subject to a Best Available Control Technology (BACT) determination in 0570261-007-AC/PSD-FL-369 for nitrogen oxides (NO_X), carbon monoxide (CO), MWC acid gases (SO_2+HCl); SO_2 as an individual pollutant, MWC organics (dioxins/furans) and opacity. The permittee took enforceable restrictions to avoid PSD for PM/PM_{10} and mercury (Hg) for MWC Unit 4.}

Unless otherwise specified, the averaging times for Specific Conditions **B.11. - B.19.** are based on the specified averaging time of the applicable test method.

Steady-State Emissions Standards

B.11. Emissions from MWC Unit 4 shall not exceed the emissions standards & limits listed in the following table or in the specific conditions and using the test methods & procedures described.

Air Pollutant	Emission Standard/Limit[1]	lb/hour[2]	Basis
Nitrogen Oxides (NO_X)	110 ppmvd, 24-hour block average; and, 90 ppmvd, 12-month rolling average	58.5 47.9	BACT BACT
Carbon Monoxide (CO)	80 ppmvd, 30-day rolling average; and, 100 ppmvd, 4- hour block average	25.9 32.4	BACT BACT/40 CFR Subpart Eb
Sulfur Dioxide (SO_2)	26 ppmvd, 24-hour block average or 80% reduction[3]	19.2	BACT/Eb
Hydrogen Chloride (HCl)[4]	25 ppmvd or 95% reduction[3]	25.4	BACT/Eb
Particulate Matter (PM/PM_{10})	12.0 mg/dscm	3.3	Avoid PSD
Lead (Pb)	140 µg/dscm	NA	Subpart Eb
Mercury (Hg)	28 µg/dscm or 85% reduction[3]	0.022	Avoid PSD/Eb
Cadmium (Cd)	10 µg/dscm	NA	Subpart Eb
Dioxins/Furans[5]	13.0 ng/dscm	3.61×10^{-6}	BACT/Eb
Opacity	10%, 6-minute average	NA	BACT/Eb
Ammonia Slip	@ 195 MMBtu/hr: 10 ppmvd @ 260 MMBtu/hr: 15 ppmvd	NA	PM, Opacity

Notes:
[1] All concentration values are corrected to 7% O_2.
µg/dscm: micrograms per dry standard cubic meter
mg/dscm: milligrams per dry standard cubic meter
ng/dscm: nanograms per dry standard cubic meter
ppmvd: part per million dry volume
NA: not applicable
[2] The "lb/hour" limitations specified under this column are determined on the appropriate averaging period specified under the preceding column.
[3] Whichever standard is less stringent.
[4] HCl is not a BACT pollutant. However, it must be limited together with SO_2 because they both comprise MWC-Acid Gases which has its own PSD threshold.

[5] Dioxins/Furans: total tetra through octa-chlorinated dibenzo-p-dioxins and dibenzofurans.
[Permit No. 0570261-007-AC (PSD-FL-369)]

B.12. Nitrogen Oxides (NO_X). Emissions of NO_X in the stack exhaust gas as measured by the required CEMS shall exceed neither 110 ppmvd nor 58.5 lb/hr on a 24-hr daily arithmetic average and shall exceed neither 90 ppmvd nor 47.9 lb/hr on a 12-month rolling average, rolled monthly.

{Permitting note: The owner or operator may request a permit modification of the 90 ppmvd NO_X standard if ammonia plume or slip issues arise and persist at the facility. The Department reserves the right to make a final determination on any such request.}

[Permit No. 0570261-007-AC (PSD-FL-369)]

B.13. Carbon Monoxide (CO). Emissions of CO in the stack exhaust gas as measured by the required CEMS shall exceed neither 100 ppmvd on a 4-hr block average nor 32.4 lb/hr and shall exceed neither 80 ppmvd nor 25.9 lb/hr on a 30-operating day rolling average. [Permit No. 0570261-007-AC (PSD-FL-369)]

B.14. Sulfur Dioxide (SO_2). Emissions of SO_2 as measured by the required CEMS shall exceed neither 26 ppmvd nor 19.2 lb/hr on a 24-hr daily geometric mean, or an emissions reduction of 80 percent, whichever is less stringent, shall be achieved. [Permit No. 0570261-007-AC (PSD-FL-369)]

B.15. Hydrogen Chloride (HCl). Emissions of HCl shall exceed neither 25 ppmvd nor 25.4 lb/hr or, an emissions reduction of 95 percent, whichever is less stringent, shall be achieved as demonstrated during the required annual stack test. [Permit No. 0570261-007-AC (PSD-FL-369)]

B.16. Mercury (Hg). Emissions of Hg shall not exceed 28 μg/dscm or an emissions reduction of 85 percent, whichever is less stringent, shall be achieved as demonstrated during the required annual stack test. In addition, mercury emissions from MWC Units 1, 2, 3 and 4 combined shall not exceed 7.1 pounds per 24-hour period when combusting sewage sludge biosolids.

[Specific Condition B.19. of Permit No. 0570261-013-AC (PSD-FL-369C); and, Specific Condition 7. of Permit No. 0570261-016-AC (PSD-FL-121E and PSD-FL-369D)]

B.17. Dioxins/Furans. Emissions of dioxins/furans shall exceed neither 13.0 ng/dscm nor 3.61×10^{-6} lb/hr. [Permit No. 0570261-007-AC (PSD-FL-369)]

B.18. Particulate Matter (PM/PM_{10}). Emissions of PM shall exceed neither 12.0 mg/dscm nor 3.3 lb/hr. This will simultaneously demonstrate compliance with the PM_{10} limits. *{Permitting note: Compliance with this condition will also demonstrate that emissions are less than the 15 TPY PSD thresholds for PM_{10} and MWC-Metals.}* [Permit No. 0570261-007-AC (PSD-FL-369) and Rule 62-212.400(12) (Source Obligation, escape PSD), F.A.C.]

B.19. Opacity. Visible emissions shall not exceed 10% (percent) opacity on a 6-minute average as measured by the required continuous opacity monitoring system (COMS) or EPA Method 9. [Permit No. 0570261-007-AC (PSD-FL-369) and Permit No. 0570261-019-AC (PSD-FL-121F and 369F)]

B.20. Source Obligation.

a. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4)

through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Permit No. 0570261-007-AC (PSD-FL-369); and, Rule 62-212.400(12) (Source Obligation, Escape PSD), F.A.C.]

Emissions Limits During Startup and Shutdown

B.21. Startup and Shutdown Emissions. After May 22, 2018, each unit shall not exceed the following emissions limits, without oxygen correction, during each startup and shutdown event:

a. *Carbon Monoxide:* 100 ppmvd based on a 24-hour block average;

b. *Sulfur Dioxide:* 26 ppmvd based on a 24-hour geometric average;

c. *Nitrogen Oxides:* 110 ppmvd based on a 24-hour block average; and,

d. *Opacity:* 10 percent based on a 6-minute block average

For the purposes of this condition, startup begins with the first firing of auxiliary fuel after a shutdown for the purpose of supplying useful thermal energy, continues through the initial combustion of MSW, and ends when 24 hours of continuous emission monitoring data have been collected. In addition, for the purposes of this condition, shutdown commences 24 hours prior to when the operator has secured the municipal waste combustor unit offline, there is no combustion of MSW or auxiliary fuel taking place, and the system has been purged of all MSW combustion products.

Permitting Note: The startup period for the purposes of excluding data from compliance calculations with respect to the steady-state emission limits pursuant to 40 CFR 60, Subpart Eb commences when the MWC unit begins the continuous burning of MSW and does not include any warmup period when the affected facility is combusting auxiliary fuel or other non-MSW fuel, and no MSW is being fed to the combustor. Shutdown, for the purposes of excluding data from compliance calculations with respect to the steady-state emission limits pursuant to 40 CFR 60, Subpart Eb, is defined as the cessation of operation of an affected unit for any purpose, i.e., when the feed chute damper to the MWC unit has been secured closed.}

[Rule 62-210.710, F.A.C.; Applicant Request; and, Permit No. 0570261-019-AC (PSD-FL-121F and 369F)]

Work Practices During Startup, Shutdown, and Malfunction

B.22. Work Practice Standards. The permittee shall utilize best practices to minimize the extent and duration of emissions to the greatest extent practicable during periods of startup, shutdown, and malfunction. Best practices shall include, but are not limited to, the following:

a. All CEMS and COMS shall be operated during all periods of startup, shutdown, and malfunction. [40 CFR 60, Subpart Eb and 40 CFR 60.59b(d)(7)]

b. Good combustion practices, including the use of the natural gas-fired auxiliary burners and excess air when needed, shall be utilized to minimize emissions during routine startup and shutdown periods. Good combustion practices shall be utilized to the extent practicable during periods of malfunction.

c. All air pollution control equipment shall be in operation during all periods of waste firing, including startup, shutdown, and MWC unit malfunction.

d. All deviations from the numerical emission limits in **Specific Condition B.21.**, and a description of any startup, shutdown, or malfunction periods during which a CEMS or COMS is not in compliance with **Specific Condition B.22.a.**, shall be included in the Semi-Annual Monitoring Report (See **Specific Condition B.40.**) [Rule 62-213.440(1)(b)3.a., F.A.C.]

[Rule 62-210.710, F.A.C.; Applicant Request; and, Permit No. 0570261-019-AC (PSD-FL-121F and 369F)]

Excess Emissions

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

B.23. Excess Emissions - Department Regulations. The following conditions apply only to the emissions limits that were specified pursuant to BACT or to avoid PSD applicability.

a. Prior to May 23, 2018, excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing best practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration. The Department authorizes three hours in any 24-hour period for this emissions unit. The duration of warmup periods is not limited. A malfunction means any unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner.

b. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

c. The permittee shall notify the Compliance Authority within one working day of discovering any emissions in excess of a CEMS standard subject to the specified averaging period. All such reasonably preventable emissions shall be included in any CEMS compliance determinations. All valid emissions data (including data collected during startup, shutdown and malfunction) shall be used to report emissions for the Annual Operating Report.

[Rules 62-210.700 and 62-4.130, F.A.C.; and, Permit No. 0570261-007-AC (PSD-FL-369)]

B.24. Excess Emissions - Regulations pursuant to 40 CFR 60, Subpart Eb. The following conditions apply only to the emissions limits that were specified pursuant to 40 CFR 60, Subpart Eb.

a. The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]

b. *Startup, Shutdown and Malfunction.* Except as provided by 40 CFR 60.56b, the standards under 40 CFR 60, Subpart Eb, as incorporated in Rule 62-204.800(8)(b), F.A.C., apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup or shutdown periods are limited to 3 hours per occurrence, except as provided in 40 CFR 60.58b(a)(1)(iii). During periods of startup, shutdown, or 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).

   i. The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warm-up period when the affected facility is combusting fossil fuel or other non-municipal solid waste fuel, and no municipal solid waste is being fed to the combustor.

   ii. Continuous burning is the continuous, semi-continuous, or batch feeding of municipal solid waste for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of municipal solid waste solely to provide thermal protection of the grate or hearth during the startup period when municipal solid waste is not being fed to the grate is not considered to be continuous burning.

   [40 CFR 60.58b(a)]

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 60.38b & 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)]

B.26. Best Practices. The owner or operator shall maintain a manual that identifies and describes best practices that will be used during periods of startup, shut down and malfunction at this facility. [Rules 62-210.700 and 62-213.440, F.A.C.]

Continuous Monitoring Requirements

{Permitting note: MWC Unit 4 is equipped with continuous emissions monitoring systems (CEMS) to measure and record NO_X, CO, and SO_2, as well as instrumentation to monitor steam flow, flue gas flow rate, oxygen, temperature, and opacity.}

B.27. 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.28. 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.29. 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 (NO_X) 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) (NO_X) & 40 CFR 60.58b(i)(3) (CO).]

B.30. CEMS. The permittee shall install, calibrate, maintain, and operate continuous emission monitoring systems (CEMS) to measure and record the emissions of CO, NO_X, and SO_2 from MWC Unit 4 in a manner sufficient to demonstrate continuous compliance with the CEMS emission standards of this subsection. All continuous monitoring systems shall be installed and functioning within the required performance specifications by the time of the initial performance tests.

a. *CO Monitor.* The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A and shall comply with all requirements of 40 CFR 60.58b. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of Section 7 shall be made each calendar quarter, and reported semiannually to the Compliance Authority. The required RATA tests shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 and shall be based on a continuous sampling train. The CO monitor span values shall be set appropriately, considering the allowable methods of operation and corresponding emission standards.

b. *NO_X Monitor.* The NO_X monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 2 and shall comply with all requirements of 40 CFR 60.58b. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of Section 7 shall be made each calendar quarter, and reported semiannually to the Compliance Authority. The required RATA tests shall be performed using EPA Method 7E in Appendix A of 40 CFR 60. The NO_X monitor span values shall be set appropriately, considering the allowable methods of operation and corresponding emission standards.

c. *SO_2 Monitor*. The SO_2 monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 2 and shall comply with all requirements of 40 CFR 60.58b. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F. The required RATA tests shall be performed using EPA Method 6C in Appendix A of 40 CFR 60. The SO_2 monitor span values shall be set appropriately, considering the expected range of emissions and corresponding emission standards.

d. *Diluent Monitor*. A continuous emission monitoring system for measuring the oxygen content of the flue gas at each location where carbon monoxide, sulfur dioxide, nitrogen oxides emissions are monitored shall be installed, calibrated, maintained, and operated in accordance with the requirements of 40 CFR 60.58b.

[40 CFR 60.58b and Specific Condition B.30. of Permit No. 0570261-013-AC (PSD-FL-369C)]

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).]

B.32. COMS. A continuous opacity monitoring system (COMS) shall be installed, calibrated, operated, and maintained in exhaust stack in a manner sufficient to demonstrate continuous compliance with the opacity standard specified in this section. Opacity shall be based on a 6-minute block average computed from at least one observation (measurement) every 15 seconds. For the COMS, the 6-minute block averages shall begin at the top of each hour. The COMS shall meet the applicable requirements of 40 CFR 60.58b(c)(8). [Permit No. 0570261-007-AC (PSD-FL-369)]

B.33. CEMS Data Requirements. The CEMS shall express the results in the units of the applicable standard and in accordance with 40 CFR 60 subparts A, and Eb.

a. *Data Exclusion*. Except for monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, each CEMS shall monitor and record emissions during all operations including episodes of startups, shutdowns, and malfunctions. Limited amounts of CEMS emissions data recorded during some of these episodes may be excluded from the corresponding compliance demonstration subject to the provisions of **Specific Conditions B.23.** and **B.24.** in this subsection. The permittee shall minimize the duration of data excluded for such episodes to the extent practicable.

b. *Monitor Availability*. Monitor availability for each CEMS used to demonstrate compliance shall be 95% or greater in any calendar quarter. Monitor availability shall be reported in the quarterly excess emissions report. In the event 95% availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit, except as otherwise authorized by the Compliance Authority.

[Specific Condition B.33. of Permit No. 0570261-013-AC (PSD-FL-369C)]

B.34. Continuous Flow Monitor. A continuous flow monitor shall be operated to determine the stack exhaust flow rate to be used in determining mass emission rates. The flow monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 6. [Rules 62-212.400, 62-204.800(8), and 62-4.070(1) & (3), F.A.C.; and, Permit No. 0570261-007-AC (PSD-FL-369)]

Test Methods and Procedures

B.35. Test Methods. Any 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	Methods for Determining PM Emissions. The minimum sample volume shall be 30 dry standard cubic feet.
EPA Methods 6, 6A or 6C	Determination of SO_2 Emissions (6C is Instrumental).
EPA Methods 7, 7C, 7E or 19	Determination of NO_X Emissions (7E is Instrumental). NO_X emissions testing shall be conducted with the highest heat input possible during the test. [1]
EPA Method 9 or COMS [2]	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 23	Measurement of D/F Emissions. Authorized to omit methylene chloride rinse. [3]
EPA Method 26 or 26A	Determination of HCl Emissions from Stationary Sources. Authorized to use large impingers in lieu of midget impingers and an empty chilled impinger in lieu of two NaOH impingers. [4]
EPA Method CTM-027 (Conditional Test Method) [5]	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.

The above methods are described in Chapter 62-297, F.A.C. and/or 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Chapter 62-297, F.A.C.; Rule 62-204.800(9)(b)7., F.A.C.; [1] Permit No. 0570261-007-AC (PSD-FL-369); [2]Authorized to use COMS data during annual particulate matter compliance test in lieu of EPA Method 9 pursuant to 60.11(e)(5); [3] Appendix ATP, U.S. EPA Alternative Test Procedure Approval dated June 3, 2004; [4] Appendix ASP, Alternate Sampling Procedure No. 15-N-AP dated April 30, 2015; and, [5] EPA Conditional Test Methods can be viewed at *https://www.epa.gov/emc/emc-conditional-test-methods*]

B.36. 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.37. VE Testing Conditions. The 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 the annual particulate matter performance tests required in lieu of EPA Method 9 observation data. If the owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify

the Department of that decision, in writing, at least 30 days before the annual particulate matter performance test is conducted. Once the owner or operator of an affected facility has notified the Department to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests until the owner or operator notifies the Department, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during the annual particulate matter performance test using COMS data, the minimum total time of COMS data collection shall be 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 particulate matter performance test. 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), 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 EPA 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); Rules 62-297.310(8), F.A.C.; and, Permit No. 0570261-019-AC (PSD-FL-121F and 369F)]

B.38. Annual Compliance Testing. Annual compliance stack tests for NO_X, CO, SO_2, HCl, PM/PM_{10}, lead, cadmium, mercury, dioxins/furans, ammonia slip, and opacity shall be conducted on a calendar year basis (no less than 9 calendar months and no more than 15 calendar months following the previous performance test) and shall complete five performance tests in each 5-calendar year period. Data collected from the reference method during the required RATA tests for CO, NO_X, and SO_2 may be used to satisfy the annual testing requirement provided the notification requirements and emission testing requirements for performance and compliance tests of this permit are satisfied.

[Rules 62-297.310(8)(a) and (b), and 62-296.416, F.A.C., and 40 CFR 60.8 and 60.58b; and, Specific Condition B.26. of Permit No. 0570261-013-AC (PSD-FL-369C); and, Permit No. 0570261-019-AC (PSD-FL-121F & 369F)]

B.39. Continuous Compliance. The permittee shall demonstrate continuous compliance with the CO, NO_X, and SO_2 emissions standards based on data collected by the certified CEMS. The permittee shall demonstrate continuous compliance with the opacity limit based on data collected by the required COMS. [Rule 62-210.200 (BACT), F.A.C., and 40 CFR 60, Subpart Eb; and, Permit No. 0570261-007-AC (PSD-FL-369)]

Recordkeeping and Reporting Requirements

B.40. 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 (quarterly)	**B.41. - B.42**
Quarterly Excess Emissions	Every 3 months (quarterly)	**B.43.**
NSPS Excess Emissions and Monitoring System Performance	Every 6 months (semi-annual), except when more frequent reporting is specifically required	**B.49.** 40 CFR 60.7(c)
Eb Semi-Annual Report	Every 6 months (semi-annual)	**B.48.** 40 CFR 60.59b(g)&(h)[1]

[1] The semi-annual reports required under 60.59b(g) or (h) shall include the fugitive ash emissions levels during the annual Method 22 performance test conducted to demonstrate compliance with **Specific Condition C.8.**

[Rule 62-210.700(5), F.A.C.; 40 CFR 60, Subparts A & Eb]

B.41. Malfunction Notifications. If temporarily unable to comply with any condition of the permit due to breakdown of equipment (malfunction) or destruction by hazard of fire, wind or by other cause, the permittee shall immediately (within one working day) notify the Compliance Authority. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. If requested by the Compliance Authority, the owner or operator shall submit a quarterly written report describing the malfunction. [Rules 62-210.700(6) and 62-4.130, F.A.C.; and, Permit No. 0570261-007-AC (PSD-FL-369)]

B.42. 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(5), F.A.C.]

B.43. SIP Quarterly Report. Within 30 days following the end of each calendar quarter, the permittee shall submit a report to the Compliance Authority summarizing: equipment malfunctions resulting in excluded CEMS data and/or excess emissions; and the monitor availability of each CEMS. The report shall contain the information and follow the general format specified in 40 CFR 60.7(c), Subpart A. [Rules 62-4.070(1) & (3), 62-4.130, and 62-210.200 (BACT), F.A.C.; and, Permit No. 0570261-007-AC (PSD-FL-369)]

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.6.e.** and **B.6.f.**) The following records shall be prepared and maintained to demonstrate compliance with the segregated non-MSW percentage limitations:

a. *Segregated Loads of non-MSW Materials*. Each segregated load of non-MSW materials, that is subject to the percentage weight limitations (see Specific Conditions **B.6.e.** and **B.6.f.**), which is received for processing shall be documented as to the description and weight of the waste. The weight of all waste materials received for processing shall be measured using the facility truck scale and recorded.

b. *Waste Tires*. Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of tires shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation. [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] Permit No. 0570261-007-AC (PSD-FL-369)]

Operator Practices, Training and Certification

B.46. 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.47. Best Management Practices (BMP's) for Biosolids Utilization. To ensure good mixing of biosolids with other waste processed in MWC Units 1, 2, 3 and 4, the owner or operator shall document and employ best management practices (BMP's) when utilizing biosolids (dewatered sewage sludge) and include the following minimum requirements:

a. The BMP's shall be incorporated into the site-specific municipal waste combustor operator training and certification pursuant to Department's MWC Rule and 40 CFR 60, Subpart Eb, 60.54b, Standards for Municipal Waste Combustor Operator Training and Certification.
b. The BMP's shall provide for operator training and identify and implement practices that promote good mixing and combustion.
c. All mixing shall occur in a waste storage bunker or refuse pit. Biosolids shall not be placed on the tipping floor, or alone, in a waste storage bunker.
d. The operator shall evenly spread biosolids with the crane grapple(s) over the top of the MSW in the waste storage bunker. Other MSW may be spread over the top of the biosolids.
e. Well-mixed (combined) materials shall be fed directly into the combustor feed hopper.
f. The owner or operator shall maintain records including the source, classification and typical characteristics (e.g. metals, pathogen results, solids) and amount introduced into the process.

[Rules 62-4.070(1) & (3) and 62-204.800(8), F.A.C.; 40 CFR 60, Subpart Eb; and, Specific Condition 11. of Permit No. 0570261-016-AC (PSD-FL-121E and PSD-FL-369D)]

NSPS 40 CFR 60 Requirements

B.48. NSPS Requirements - Subpart Eb. Except as otherwise provided in this permit, this emissions unit 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). [Rule 62-204.800(8)(b)7., F.A.C.]

B.49. 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. [Rule 62-204.800(8)(d), F.A.C.]

Other Requirements

B.50. 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)(h), F.A.C.] Back to Table of Contents

Subsection C. Emissions Units 100 and 112
Ash Building and Handling System

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

EU No.	Brief Description
-100	Ash Building and Handling System - Baghouse
-112	Ash Building and Handling System - Wet Scrubber

Fly ash and bottom ash from MWC Units 1 – 4 are collected and conveyed to the ash handling building. The ash handling system is completely enclosed or otherwise covered to minimize the potential for fugitive emissions. The combined ash stream is quenched in a water bath then discharged onto a collection conveyor, and then wetted before being temporarily stored in the ash handling facility and loaded into trucks. A baghouse and wet scrubber are located at the ash handling building as an added precaution to prevent fugitive emissions. The baghouse and scrubber maintain negative pressure in the ash handling building. The baghouse filters approximately 12,000 acfm of building air and vents to a 2 foot diameter, 5 foot tall stack. The wet scrubber, which was added with the ash handling building expansion in 2009, controls approximately 7,000 acfm of building air and vents to a 1.5 foot diameter, 22 foot high stack.

The ash handling system began initial operation on December 18, 1986 and was modified with the addition of MWC Unit 4 in 2009.

{Permitting note(s): These emissions units are regulated under Rule 62-210.300 and 62-213.400, F.A.C., Permits Required and Rule 62-212.400(12) (Source Obligation, PSD Applicability Avoidance), F.A.C.; and, PSD-FL-121 and PSD-FL-369, as amended. The ash conveying systems of E.U. ID Nos. 100 & 112 are regulated under 40 CFR 60, Subpart Eb, NSPS for Large Municipal Waste Combustors.}

Essential Potential to Emit (PTE) Parameters

C.1. Hours of Operation. These emissions units may operate continuously (8,760 hours/year). [Rule 62-210.200 (Definitions - Potential to Emit (PTE), F.A.C.; and, PSD-FL-121 & PSD-FL-369, 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(2), F.A.C.]

Air Pollution Control Technologies and Measures

C.3. Wet Scrubber Controls. The ash handling building was expanded during the MWC Unit 4 project. The building exhaust had been controlled by a baghouse installed in accordance with Permit No. PSD-FL-112B issued on October 14, 1987. In conjunction with the ash building expansion, the permittee installed a wet dust collection system in addition to the existing baghouse to control the ventilation exhaust from the ash handling building. The wet scrubber shall be a "Whirl/Wet Dust Collector Size 70, Model H" (or equivalent) designed for the following specifications:

a. 7,000 actual cubic feet per minute;
b. Approximately 40% control for submicron particles;
c. 80% control for particles ≥ 1.0 micron;
d. 95% control for particles ≥ 2.0 micron;
e. 97% control for particles ≥ 3.0 micron;
f. 98% control for particles ≥ 5.0 micron; and,
g. 99% control for particles ≥ 10.0 micron.

A Dwyer magnehelic pressure gauge/switch (or equivalent) shall be operated to measure the differential pressure across the unit control and control the water level to maintain a differential pressure of 8.0 ± 1.5 inches of water column. In addition, an alarm system shall be operated to warn of high water levels and low water levels. [Applicant Request/Design; Rule 62-4.070(1) & (3), F.A.C.; and, Permit Nos. 0570261-010-AC (PSD-FL-369B) and 0570261-015-AC (PSD-FL-121D)]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions **C.4. - C.8.** are based on the specified averaging time of the applicable test method.

C.4. Baghouse - PM. PM emissions from the ash handling facility baghouse shall not exceed 1.63 lbs/hour. [Permit No. 0570261-002-AC (PSD-FL-121C)]

C.5. Baghouse - VE. Visible emissions from the ash handling facility baghouse shall not exceed 5 percent opacity. [Permit No. 0570261-002-AC (PSD-FL-121C)]

C.6. Additional Emission Limitations and Standards. The following standards apply to each emission point of these emissions units:

a. Visible emissions are limited to 5% opacity from each of the above listed emissions points controlled by a baghouse or wet scrubber.

b. Unconfined emissions are limited to 10% opacity from any emissions point not controlled by a baghouse or wet scrubber.

c. Emissions of particulate matter (PM) from the wet scrubber shall not exceed 0.066 lb/hour as determined by EPA Method 5. No initial or subsequent PM stack tests are required as long compliance is demonstrated with the 5% opacity standard and the wet scrubber is properly maintained.

{Permitting note: The 5% opacity limitation is consistent with the design specifications and provides reasonable assurance that annual emissions of PM/PM_{10} for E.U. ID Nos. 108, 110 & 112 combined are less than 0.40 TPY to avoid PSD applicability} [Rules 62-4.070(1) & (3) and 62-297.310(8), F.A.C.; and, Permit No. 0570261-010-AC (PSD-FL-369B)]

C.7. Ash Handling Activities. The potential for dust generation by ash handling activities will be mitigated by quenching the ash prior to loading into ash transport trucks. The ash handling facilities shall be enclosed. Unprocessed refuse storage areas which must be open for operational purposes (e.g., tipping floor of the refuse bunker while trucks are entering and leaving) will be under negative air pressure. 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. 0570261-002-AC (PSD-FL-121C); Rule 62-4.070(1) & (3), F.A.C.; and, 40 CFR 60.55b.]

Fugitive Ash Emissions

C.8. Fugitive Ash Emissions. **This condition only applies to the ash conveying systems and building openings (fugitive emissions).**

a. As determined by annual EPA Reference Method 22 observations, 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 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 60.55b.]

Excess Emissions

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

C.9. Excess Emissions Allowed. Prior to May 23, 2018, excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best 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.10. 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(1), F.A.C.]

Monitoring Requirements

C.11. Wet Scrubber O&M Plan. For the wet scrubber, the permittee shall maintain an operation and maintenance (O&M) plan to address proper operation, parametric monitoring, and a schedule for conducting periodic inspections and preventive maintenance. Wet scrubber inspections and maintenance activities shall be recorded in a written log and made available for inspection by the Department upon request. [Rules 62-4.070(1) & (3), F.A.C.; and, Permit No. 0570261-010-AC (PSD-FL-369B)]

C.12. Wet Scrubber Monitoring. The wet scrubber shall be operated in accordance with the manufacturer's recommendations for the given operating conditions. The permittee shall take corrective actions as necessary when the water level alarm activates. [Rule 62-4.070(1) & (3), F.A.C.; and, Permit No. 0570261-010-AC (PSD-FL-369B)]

Test Methods and Procedures

C.13. 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 Methods 1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
EPA Method 5	Methods for Determining Particulate Matter Emissions
EPA Method 9	Visual Determination of the Opacity of Emissions
EPA Method 22	Visual Determination of Fugitive Emissions from Material Sources

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

C.14. Annual Compliance Test. Except as specified in **Specific Condition C.15.**, during each calendar year (January 1 – December 31), the baghouse & wet scrubber exhausts and the ash handling system shall be tested to demonstrate compliance with the visible emissions (VE) limitation. In addition, the ash conveying system enclosures shall be tested for fugitive emissions to demonstrate compliance with **Specific Condition C.8.** [Rule 62-297.310(8), F.A.C.; and, Permit Nos. 0570261-002-AC (PSD-FL-121C) & 0570261-010-AC (PSD-FL-369B)]

C.15. Visible Emissions Test in Lieu of PM Stack Test. The owner or operator is permitted to comply with the VE limits and the VE testing requirement in lieu of regularly demonstrating compliance with each PM

limitation. If the Department has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any particulate matter limitation is not being met, it shall require compliance be demonstrated by conducting a particulate matter test in accordance with EPA Method 5 specified at 40 CFR 60 Appendix A. [Applicant Request; Rules 62-4.070(1) & (3), 62-4.160(2), 62-297.310(8), and 62-297.620, F.A.C.; Permit Nos. 0570261-002-AC (PSD-FL-121C) and 0570261-010-AC (PSD-FL-369B)]

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

Recordkeeping and Reporting Requirements

C.17. 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 (quarterly)	**C.18.**

[Rule 62-210.700(5), F.A.C.]

C.18. 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(5), F.A.C.]

C.19. 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.19. - C.20.** only apply to the ash conveying systems (fugitive emissions) from the ash handling building}*

NSPS 40 CFR 60 Requirements

C.20. 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). [Rule 62-204.800(8)(b)7., F.A.C.]

C.21. 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.
[Rule 62-204.800(8)(d), F.A.C.] Back to Table of Contents

Subsection D. Emissions Units 101, 102, 108, & 110
Lime and Activated Carbon Storage Silos

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

EU No.	Brief Description
-101	Pebble Lime Storage Silo - MWC Units 1, 2 & 3
-102	Activated Carbon Storage Silo - MWC Units 1, 2 & 3
-108	Pebble Lime Storage Silo - MWC Unit 4
-110	Activated Carbon Storage Silo - MWC Unit 4

This emissions unit subsection addresses two pebble lime storage silos and two activated carbon storage silos.

The E.U. ID No. 101 pebble lime storage silo serves MWC Units 1, 2 & 3. E.U. ID No. 101 is a 60 ton capacity silo for the storage of pebble lime. It is part of the spray dry absorber (SDA) system used for control of acid gases and sulfur dioxide emissions from the municipal waste combustion units. A supply truck pneumatically transfers pebble lime to the silo through a fill line. A baghouse is utilized to filter dust (particulate matter) laden air from the lime silo during filling operations. The baghouse filters the air at approximately 5,700 acfm and vents directly to a 0.66 feet diameter outlet approximately 40 feet above grade. Material captured by the baghouse is returned to the silo as usable product. The initial startup date of the silo was October 1, 2000.

The E.U. ID No. 102 activated carbon storage silo serves MWC Units 1, 2 & 3. E.U. ID No. 102 is a 20 ton filling capacity silo for the storage of activated carbon powder. It is part of the activated carbon injection (ACI) system for the control of mercury emissions from the municipal waste combustion units. A supply truck pneumatically transfers the activated carbon powder to the silo through a fill line. A baghouse is utilized to filter dust (particulate matter) laden air from the carbon silo during filling operations. The baghouse filters the air at approximately 5,700 acfm and vents directly to a 0.66 feet diameter outlet approximately 40 feet above grade. Material captured by the baghouse is returned to the silo as usable product. The initial startup date of the silo was October 1, 2000.

The E.U. ID No. 108 pebble lime storage silo is dedicated to MWC Unit 4. E.U. ID No. 101 is a 60 ton capacity silo for the storage of pebble lime. This silo has a volume of approximately 2,900 cubic feet. It is part of the spray dry absorber (SDA) system used for control of acid gases and sulfur dioxide emissions from the municipal waste combustion unit. A supply truck pneumatically transfers pebble lime to the silo through a fill line. A baghouse is utilized to filter dust (particulate matter) laden air from the lime silo during filling operations. The baghouse filters the air at approximately 5,700 acfm and vents directly to a 0.416 feet diameter outlet approximately 57.5 feet above grade. Material captured by the baghouse is returned to the silo as usable product. The initial startup date of the silo was July 9, 2009.

The E.U. ID No. 110 activated carbon storage silo is dedicated to MWC Unit 4. E.U. ID No. 110 is a 20 ton filling capacity silo for the storage of activated carbon powder. This silo has a volume of approximately 1,500 cubic feet. It is part of the activated carbon injection (ACI) system for the control of mercury emissions from the municipal waste combustion unit. A supply truck pneumatically transfers the activated carbon powder to the silo through a fill line. A baghouse is utilized to filter dust (particulate matter) laden air from the carbon silo during filling operations. The baghouse filters the air at approximately 5,700 acfm and vents directly to a 0.416 feet diameter outlet approximately 52.5 feet above grade. Material captured by the baghouse is returned to the silo as usable product. The initial startup date of the silo was July 10, 2009.

{Permitting note(s): These emissions units are regulated under Rule 62-210.300 and 62-213.400, F.A.C., Permits Required and Rule 62-212.400(12) (Source Obligation, PSD Applicability Avoidance), F.A.C. and, PSD-FL-121 and PSD-FL-369, as amended.}

Subsection D. Emissions Units 101, 102, 108, & 110
Lime and Activated Carbon Storage Silos

Essential Potential to Emit (PTE) Parameters

D.1. Hours of Operation. These emissions units may operate continuously (8,760 hours/year). [Rule 62-210.200 (Definitions - Potential to Emit (PTE), F.A.C.; and, Permit Nos. 0570261-002-AC (PSD-FL-121C) and 0570261-007-AC (PSD-FL-369)]

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

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions **D.3. - D.4.** are based on the specified averaging time of the applicable test method.

D.3. Particulate Matter Emissions.

a. *E.U. ID No. 101, Pebble Lime Storage Silo*. Particulate matter emissions shall not exceed 0.015 gr/dscf (front-half catch) from the baghouse outlet at the pebble lime storage silo.

b. *E.U. ID No. 102, Activated Carbon Storage Silo*. Particulate matter emissions shall not exceed 0.015 gr/dscf (front-half catch) from the baghouse outlet at the activated carbon storage silo.

c. *E.U. ID No. 108, Pebble Lime Storage Silo*. Particulate matter emissions shall not exceed 0.015 gr/dscf from the baghouse outlet at the pebble lime storage silo.

d. *E.U. ID No. 110, Activated Carbon Storage Silo*. Particulate matter emissions shall not exceed 0.015 gr/dscf from the baghouse outlet at the activated carbon storage silo.

[Applicant Request; Rules 62-4.160(2), 62-210.200(PTE), and 62-297.620, F.A.C.; Permit Nos. 0570261-002-AC (PSD-FL-121C & 0570261-007-AC (PSD-FL-369)]

D.4. Visible Emissions. Visible emissions from each silo baghouse exhaust shall not exceed 5% opacity. *{Permitting note: The 5% opacity limitation is consistent with the design specifications and provides reasonable assurance that annual emissions of PM/PM_{10} for Emissions Unit ID Nos. 108, 110 & 112 combined will be less than 0.40 TPY to avoid PSD applicability}* [Applicant Request; Rules 62-4.160(2) and 62-297.620, F.A.C.; and, Permit Nos. 0570261-002-AC (PSD-FL-121C) and 0570261-007-AC (PSD-FL-369)]

Excess Emissions

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

D.5. Excess Emissions Allowed. Prior to May 23, 2018, excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best 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.]

D.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(1), F.A.C.]

Monitoring of Operations

D.7. Baghouse O&M Plan. For the E.U. ID Nos. 108 & 110 baghouses, the permittee shall maintain an operation and maintenance (O&M) plan to address proper operation, parametric monitoring, and a schedule for conducting periodic inspections and preventive maintenance. Baghouse inspections and maintenance activities shall be recorded in a written log and shall be made available to the Department upon request. [Permit No. 0570261-007-AC (PSD-FL-369)]

Test Methods and Procedures

D.8. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
EPA Methods 1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
EPA Method 5	Methods for Determining Particulate Matter Emissions
EPA Method 9	Visual Determination of the Opacity of Emissions

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

D.9. Annual Compliance Test. Except as specified in Specific Condition **D.10.**, during each calendar year (January 1 – December 31), each silo baghouse exhaust shall be tested to demonstrate compliance with the visible emissions (VE) limitation. [Rule 62-297.310(8), F.A.C.]

D.10. Visible Emissions Test in Lieu of PM Stack Test. The owner or operator is permitted to comply with the VE limit and the VE testing requirement in lieu of regularly demonstrating compliance with each PM limitation. If the Department has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) believe that any particulate matter limitation is not being met, it shall require compliance be demonstrated by conducting a particulate matter test in accordance with EPA Method 5 specified at 40 CFR 60 Appendix A. [Applicant Request; Rules 62-4.070(3), 62-4.160(2), 62-297.620, F.A.C.; and, Permit Nos. 0570261-002-AC (PSD-FL-121C) and 0570261-007-AC (PSD-FL-369)]

D.11. Visible Emissions Test. The duration of each EPA Method 9 test shall be a minimum of 30 minutes. [Rule 62-297.310(4)(a)2., F.A.C.]

D.12. Common Testing Requirements. Unless otherwise specified above, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

Recordkeeping and Reporting Requirements

D.13. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition
Excess Emissions from Malfunctions, if requested by the Compliance Authority	Every 3 months (quarterly)	**D.14.**

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

D.14. 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(5), F.A.C.]

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

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Subsection E. Emissions Units 113 & 114
Existing Internal Combustion Engines

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

EU No.	Brief Description
-113	Fire Pump (Diesel) - 235 HP
-114	Emergency Generator - No. 1 at Falkenburg Advanced WWTP

One "existing" CI fire pump is located at the Hillsborough County Resource Recovery facility provides water suppression in the event of an emergency. The fire pump is rated at 235 brake-horsepower and was manufactured in 1986.

One "existing" CI emergency generator provides emergency power to the Falkenburg Advanced Wastewater Treatment Plant (WWTP) which is located adjacent to the Hillsborough County Resource Recovery Facility. The emergency generator is rated at 1,000 HP and generates approximately 2 MW of emergency power to run the WWTP equipment, as needed in the event of an outage. The generator was manufactured in 2000.

Engine Identification	Engine Type	Engine Brake HP	Date of Manufacture	Displacement liters/cylinder (l/c)	Engine Manufacturer	Model No.
Emergency Fire Pump	CI	235	1986	1.3	Caterpillar	3208
Emergency Generator No. 1 (WWTP)	CI	1,000	2000	4.3	Caterpillar	3516B

{Permitting Notes: These CI 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 section addresses "existing" emergency stationary CI RICE engines with a displacement of less than 10 liters per cylinder that are located at a major source of HAP and that commenced construction before 6/12/2006; and, that have not been modified or reconstructed after this date.

Pursuant to 40 CFR 60, Subpart IIII, NSPS for Stationary Compression Ignition RICE, these are "existing" emergency engines that have not been modified or reconstructed after 7/11/2005. Therefore, they are not subject to 40 CFR 60, Subpart IIII.} Link to 40 CFR 63, Subpart ZZZZ

Essential Potential to Emit (PTE) Parameters

E.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. *Other Situations*. You may operate your emergency stationary RICE for maintenance and testing specified in this paragraph for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph c. counts as part of the 100 hours per calendar year allowed by this paragraph. This RICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. 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 RICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the

100 hours per calendar year for maintenance and testing provided in paragraph b., above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)(3) & (4)]

E.2. Work or Management Practice Standards.

a. *Oil*. Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63.6600 and 63.6602; and 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 63.6600 and 63.6602; and 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 63.6600 and 63.6602; and 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), 63.6640(a)] *{Permitting Note: This paragraph only applies to the fire pump.}*
e. *Engine Startup*. During periods of startup the owner or operator must minimize the engine's time spent at idle during startup 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)]
f. *Oil Analysis*. The owner or operator has the option of using an oil analysis program to extend the oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in paragraph **a**., above. 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

E.3. Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

Compliance

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

E.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)]

Reporting Requirements

E.6. 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 Condition E.2.**, 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]

Recordkeeping Requirements

E.7. 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. [40 CFR 63.6655(a)(1)]
b. Records of the occurrence and duration of each malfunction of operation. [40 CFR 63.6655(a)(2)]
c. Records of all required maintenance performed on the hour meter. [40 CFR 63.6655(a)(4)]
d. Records of actions taken during periods of malfunction to minimize emissions in accordance with **Specific Condition E.5.**, including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
e. Records of the actions required in **Specific Condition E.2.d.** to show continuous compliance with each emission limitation or operating requirement. [40 CFR 63.6655(d)]
f. Records of the Work or Management Practice Standards specified in **Specific Condition E.2.** [Rule 62-213.440(1)(b)2.a., F.A.C.]
g. Records of the maintenance conducted in order to demonstrate that the RICE was operated and maintained according to your own maintenance plan. [40 CFR 63.6655(e)]
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. [40 CFR 63.6655(f)]

[Rule 62-213.440, F.A.C. and 40 CFR 63.6655]

E.8. 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)]

General Provisions

E.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 43 CFR 63.6675)
§63.3	Units and abbreviations
§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 63.6645(a), 63.6665 & Table 8 to Subpart ZZZZ of Part 63]

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Subsection F. Emissions Units 115, 116, & 117
New Internal Combustion Engines

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

EU No.	Brief Description
-115	Emergency Generator - No. 2 at Falkenburg Advanced WWTP
-116	Emergency Generator - No. 3 at Falkenburg Advanced WWTP
-117	Emergency Generator - No. 4 at Falkenburg Advanced WWTP

Three "new" CI emergency generators provide emergency power to the Falkenburg Advanced Wastewater Treatment Plant (WWTP), which is located adjacent to the Hillsborough County Resource Recovery Facility. Each engine is rated at 800 HP and generates approximately 2 MW of emergency power to run the WWTP equipment, as needed in the event of an outage. All three engines were manufactured in 2007. Compliance with the emissions limits is demonstrated by maintaining the manufacturer's emissions certification.

Engine Identification	Engine Type	Engine Brake HP	Date of Manufacture	Displacement liters/cylinder (l/c)	Engine Manufacturer	Model No.
Emergency Generator No. 2 (WWTP)	CI	800	2007	3.8	Cummins	DQKAB 5892510
Emergency Generator No. 3 (WWTP)	CI	800	2007	3.8	Cummins	DQKAB 5892510
Emergency Generator No. 4 (WWTP)	CI	800	2007	3.8	Cummins	DQKAB 5892510

{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 a major source of HAP, that commenced construction on or after 6/12/2006, and that has a post-2007 model year. 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

F.1. Authorized Fuel. This 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)]

F.2. Restricted Hours of Operation. The owner or operator must comply with the following limitations for this emergency engine. If you do not operate the engine 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. *Other Situations*. You may operate this emergency stationary ICE for maintenance and testing specified in this paragraph for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph c. counts as part of the 100 hours per calendar year allowed by this paragraph. This emergency stationary ICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. 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)(i)]

c. *Non-emergency Situations*. This emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph b., above. The 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(4) The power is provided only to the facility itself or to support the local transmission and distribution system.

(5) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 CFR 60.4211(f)(3)]

Emission Limitations

F.3. NMHC + NO_X Emissions. Emissions of non-methane hydrocarbons plus nitrogen oxide shall not exceed 6.4 grams per kilowatt-hour (g/KW-hr).

[40 CFR 60.4205(b), 60.4202(a)(2) and 89.112]

F.4. CO Emissions. Emissions of carbon monoxide shall not exceed 3.5 g/KW-hr.

[40 CFR 60.4205(b), 60.4202(a)(2) and 89.112]

F.5. PM emissions. Emissions of particulate matter shall not exceed 0.20 g/KW-hr.

[40 CFR 60.4205(b), 60.4202(a)(2) and 89.112]

Monitoring Requirements

F.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

F.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. These RICE must be maintained and operated to meet the emissions limits in **Specific Conditions F.3 - F.5.** over the entire life of the engine. [40 CFR 60.4206 & 4211(a)]

F.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 F.9.** [40 CFR 60.4211(c)]

F.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 to demonstrate compliance 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. if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action. [40 CFR 60.4211(c) & (g)]

F.10. Testing Requirements. In the event performance tests are required pursuant to **Specific Condition F.9.**, the following requirements shall be met:

a. *Testing Procedures*. 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

b. *NTE Standards*. Exhaust emissions from these engines must not exceed the not-to-exceed (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standard (STD) in **Specific Conditions F.3 - F.5.**, determined from the following equation:

NTE Requirement For Each Pollutant = (1.25) x (STD) (Eq. 1)

[40 CFR 60.4212(a) & (c)]

F.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

F.12. Testing Notification. At such time that the requirements of **Specific Condition F.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.]

F.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)]

F.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 F.8.** and **F.9,** 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)]

F.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

F.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 F.9.** and **F.10.**)
§ 60.9	Availability of information
§ 60.10	State Authority
§ 60.12	Circumvention
§ 60.14	Modification
§ 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]

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