



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

05/20/05

- CERTIFIED MAIL - RETURN RECEIPT REQUESTED -

Mr. Daryl Smith
Hillsborough County Solid Waste Management Department
601 East Kennedy Boulevard
Tampa, Florida 33602

RECEIVED

MAY 23 2005

**RE: Hillsborough County Resource Recovery
Modification to Conditions of Certification
DEP Case Number PA 83-19D
OGC Case Number 05-0528**

DIVISION OF AIR
RESOURCE MANAGEMENT

FINAL ORDER MODIFYING CONDITIONS OF CERTIFICATION

Dear Mr. Smith:

On April 30, 2003, the Department of Environmental Protection (DEP) issued a final Title -V permit revision for Hillsborough County Resource Recovery Facility (Hillsborough). Review of the Conditions of Certification for Hillsborough indicated that a modification would be necessary.

On or before April 1, 2005 all parties to the certification proceeding were provided with notice by certified mail of the Department's intent to modify the Conditions of Certification for this facility, along with a copy of the proposed Order Modifying Conditions of Certification. Additionally, on April 1, 2005, notice of the Department's intent to modify the Conditions of Certification for this facility was published on the Department's internet home page at <http://www.dep.state.fl.us/> under the link or button titled "Official Notices." Those notices specified that pursuant to Section 403.516, Florida Statutes ("F.S."), and Rule 62-17.211, Florida Administrative Code ("F.A.C."), all parties to the certification proceeding have 45 days from the issuance of notice by mail to such party's last address of record in which to file a written objection to the modification; that any person who is not already a party to the certification proceeding and whose substantial interests will be affected by the requested modification has 30 days from the date of publication of the public notice on the Department's internet home page to

object in writing; that failure to act within the time frame constitutes a waiver of the right to become a party; and that the Department will issue an Order Modifying the Conditions of Certification for this facility if no written objections are received by the Department.

No objections to the modification have been received by the Department. The Conditions of Certification for Hillsborough County Resource Recovery Facility are hereby modified as follows:

- All reference to 'DER' or 'Department of Environmental Regulation' is changed to DEP or Department of Environmental Protection
- All reference to 'permittee' is changed to licensee
- All reference to 'permit' is changed to Certification
- All reference to 'Chapter 17' is changed to Chapter 62
- All reference to phone number '487-0472' is changed to 245-8001
- Revision Title V Permit No. 0570261-005-AV is attached and incorporated as Appendix A

II. OPERATION

A. Air

1. Administrative

a. All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation, MS 5500, Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, telephone (850) 488-1344, and the Siting Coordination Office, MS 48, Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, telephone (850) 487-0472/245-8001. All documents related to reports, tests, and notifications should be submitted to the Department's Southwest District office, 3804 Coconut Palm Drive, Tampa, Florida 33619 and phone number (813) 744-6100 and the Environmental Protection Commission of Hillsborough County, 1900 Ninth Avenue, Tampa, Florida 33605 and telephone number (813) 272-5960.

b. ~~The owner and operator is subject to and shall operate under the General Conditions, II.A.16, of this permit. The terms, conditions, requirements, limitations, and restrictions set forth in Permit Title V - 0570261-005-AV, which is attached as Appendix A to these Conditions, and any modification or amendment to such Title V permit, are incorporated by reference herein, and are binding and enforceable Conditions of this Certification. The licensee is subject to and shall comply with the terms, conditions, requirements, limitations, restrictions set forth in Appendix A. A violation of the terms conditions, requirements, limitations and restrictions in Appendix A is a violation of these Conditions of Certification. These General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes.~~

~~c. The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.~~

~~d. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C.~~

~~e. Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, or if construction is discontinued for a period of 18 months or more,~~

or if construction is not completed within a reasonable time. Upon written request by the permittee, the Department may extend the 18-month period upon a satisfactory showing that an extension is justified.

f. An application for a modification of the Title V operating permit, pursuant to Chapter 62-213, F.A.C., must be submitted to the Department's Bureau of Air Regulation, and a copy to the Department's Southwest District office and the Hillsborough County Environmental Protection Commission.

g. Pursuant to Rule 62-4.080, F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.

c. The Department is delegated the authority to modify these Conditions of Certification to conform them to any subsequently issued amendment or modification to Permit No. 0570261-005-AV, pursuant to Conditions XIV, below.

d. The provisions set forth in Conditions II.A.2-4 are excerpted from Permit Title V - 0570261-005-AV.

2. Construction

a. Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit(s) shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S., Rules 62-4, 62-103, 62-204, 62-212, 62-213, 62-296, 62-297, F.A.C., and the Code of Federal Regulations Section 40, Part 60, adopted by reference in Rule 62-204.800, F.A.C. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting or regulations [Rule 62-210.300, F.A.C.].

3. Operation

a. The owner or operator shall submit to the Department's Bureau of Air Regulation, for review any changes in, or modifications to: the method of operation; process or pollution control equipment; increase in hours of operation; equipment capacities; or any change which would result in an increase in potential/actual emissions. Depending on the size and scope of the modification, it may be necessary to submit an application for, and obtain, an air construction permit prior to making the desired change. Routine maintenance of equipment will not constitute a modification of this permit.

b. If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the Department's Southwest District office and the Hillsborough County Environmental Protection Commission as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations.

c. Operating procedures shall include good combustion practices and proper training and certification of all operators. The good combustion practices shall meet the guidelines established in 40 CFR 60, Subpart Cb and procedures as established by recognized industry standards. All operators (including supervisors) of air pollution control devices shall be properly trained and certified in plant specific equipment. A list of all such certified personnel shall be submitted to the Department's Southwest District office. Department staff shall be given notice of any formal training sessions related to operation and maintenance of air pollution control devices.

~~d. An Alternate Sampling Procedure (ASP) may be requested from the Bureau of Air Monitoring and Mobile Sources of the Florida Department of Environmental Protection in accordance with the procedures specified in Rule 62-297.620, F.A.C.~~

~~4. Determination of Process Variables~~

~~a. The permittee shall operate and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.~~

~~b. Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weigh hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.~~

~~5. 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.~~

~~6. Steam Generation Unit Actual Emissions~~

~~The permittee shall provide the Department, within the period not longer than 10 years following any change, information demonstrating that the physical or operational change did not result in a "representative actual annual emissions" increase in accordance with Rule 62-210.200 (12)(d), F.A.C., and Rule 62-212.400, F.A.C.~~

7.2. Emissions Limits Units 001, 002 and 003: General Provisions

a. The following emission limitations shall apply to each affected emissions unit after the proposed improvements to comply with 40 CFR 60 Subpart Cb are made and compliance testing is completed. This section addresses the following emissions units: Description: Each unit is a municipal waste combustor and auxiliary burner having a nominal design rate capacity of 400 tons MSW per day, 150 MMBtu per hour (excluding 9.9 MMBtu/hr from the combustion air preheaters) and 94,270 pounds steam per hour with MSW having a heating value of 4,500 Btu per pound. The units are described as follows:

<u>EMISSIONS UNIT NO.</u>	<u>EMISSIONS UNITS DESCRIPTION</u>
<u>001</u>	<u>150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners - Unit No.1</u>
<u>002</u>	<u>150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners - Unit No.2</u>
<u>003</u>	<u>150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners - Unit No.3</u>
<u>xxx</u>	<u>Ash Building and Handling System</u>

b. ~~The affected emissions units shall comply with all applicable requirements of 40 CFR 60, General Provisions, Subpart A. Fuels and Capacity: The primary fuel for the facility is municipal solid waste (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 (1995). Auxiliary burners for each unit shall be fired only by natural gas. The annual capacity factor for natural gas shall be 10 percent or less. The maximum individual MWC~~

throughput shall not exceed 460 tons MSW per day (1380 tons per day entire facility), and, 102,000 pounds steam per hour (on a 4-hour block arithmetic average).

- ~~_____ A.1 [40 CFR 60.7, Notification and record keeping]~~
- ~~_____ A.2 [40 CFR 60.8, Performance tests]~~
- ~~_____ A.3 [40 CFR 60.11, Compliance with standards and maintenance requirements]~~
- ~~_____ A.4 [40 CFR 60.12, Circumvention]~~
- ~~_____ A.5 [40 CFR 60.13, Monitoring requirements]~~
- ~~_____ A.6 [40 CFR 60.19, General notification and reporting requirements]~~

~~c. The affected emissions units shall comply with all applicable provisions of the 40 CFR 60, Subpart E and Subpart Cb, New Stationary Source Standards of Performance for Incinerators and Emissions Guidelines for Existing Municipal Waste Combustors along with applicable requirements of Subpart Db, New Source Performance Standards for Steam Generating Units, 40 CFR 61.30, Subpart C, NESHAP for Beryllium and Rule 62-296.416, F.A.C., Waste to Energy Facilities. In addition these emissions units shall also comply with all the conditions listed in Section II (Emissions Unit General Requirements) of this permit. Controls: Pollution control equipment includes a spray dryer absorber, a fabric filter, and activated carbon injection system. A selective non-catalytic reduction system (SNCR) and auxiliary gas burners are installed in the furnaces.~~

~~d. Stack Parameters: Emissions exhaust through a 220 feet tall stack.~~

~~_____ **8. Emissions Limits, Specific Conditions**~~

~~_____ The following Specific Conditions apply to the following emissions units after improvements to comply with 40 CFR Subpart Cb are completed.~~

EMISSIONS UNIT NO.	EMISSIONS UNITS DESCRIPTION
001	150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners Unit No.1
002	150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners Unit No.2
003	150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners Unit No.3

~~{NOTE: Each of the three municipal waste combustor (MWCs) shall have a nominal design rate capacity of 400 tons MSW per day, 150 MMBtu per hour (excluding 9.9 MMBtu/hr from the combustion air preheaters) and 94,270 pounds steam per hour with MSW having a heating value of 4,500 Btu per pound. The "operating window" of 115 percent (%) over the nominal design rate of 150 MMBtu heat input corresponds to 172.5 MMBtu/hr heat input and 102,000 lb steam/hour per each boiler.~~

~~_____ By letter dated March 17, 1998, D.B Riley, Inc. (boilers' manufacturer) indicated that it performed an evaluation of each boiler's ability to operate at the proposed increased steam flow of 102,000 lb steam/hr and concluded that each boiler can safely operate at an increased continuous steam generation rate of 103,700 lb steam/hr. Short term capacity is limited by limiting steam production (102,000 lb/hr), which effectively limits heat input. The net steam energy of 1378.86 Btu/lb per boiler shall not be exceeded.}~~

~~**93. Operational Requirements Restrictions**~~

~~a. The combustor boilers shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type of waste, and rated capacity. Permitted Capacity: The maximum individual MWC throughput shall not exceed 460 tons MSW per day (1380 tons per day entire facility), and, 102,000 pounds steam per hour (on a 4-hour block arithmetic average). The incinerators/boilers shall not be loaded in excess of their maximum operating capacity, equivalent to 1380 tons MSW per day total, but no more than 1200 tons MSW per day on an annual (52 week rolling average) average basis for the entire facility.~~

b. ~~Process Operating Rates-Primary Fuel: The primary fuel for the facility is municipal solid waste (MSW). Other authorized fuels for the facility also include the other solid wastes that are not MSW such as listed in Title V Permit Specific Condition C.6.5.~~

~~(1) The maximum individual MWC throughput shall not exceed 460 tons MSW per day (1380 tons per day entire facility), 172.5 MMBtu per hour and 102,000 pounds steam per hour (on a 4-hour block arithmetic average). The incinerators/boilers shall not be loaded in excess of their maximum operating capacity, equivalent to 1380 tons MSW per day total, but no more than 1200 tons MSW per day on an annual (52-week rolling average) average basis for the entire facility. (Compliance per Specific Conditions H.A.10.f and H.A.10.g)~~

~~(2) Combustion efficiency shall be calculated by: $\%CE = [1/(1+(CO/CO_2))] \times 100$, and shall be at least 99.5% for an 8-hour average.~~

c. ~~Unit Load-Auxiliary Fuel: Auxiliary burners for each unit shall be fired only by natural gas. The annual capacity factor for natural gas shall be 10 percent or less. Monthly records shall be maintained of the amount of natural gas used by the auxiliary burners in each unit; and, the equivalent gross heat input.~~

~~Unit load means the steam load of the municipal waste combustor (MWC) measured as specified in 40 CFR 60.58b(i)(6). Each MWC unit shall not operate at a load level greater than 110 percent of the unit's maximum demonstrated unit load. The maximum demonstrated unit load is the highest 4-hour arithmetic averaged MWC unit load achieved during four consecutive hours during the most recent dioxin/furan performance stack test in which compliance with the dioxin/furan emission limit was achieved. Higher loads are allowed for testing purposes as specified at 40 CFR 60.53b(b).~~

4. ~~d.~~ Emission Control Equipment

a. ~~(1) Particulate Matter: The combustor's particulate control baghouse shall be designed, constructed and operated to not exceed a maximum emission rate of 27 mg/dscm corrected to 7 percent O₂. These baghouse/collectors shall be equipped with pressure drop monitoring equipment.~~

b. ~~(2) Spray Dry Scrubber: The facility shall be equipped with dry scrubbers which are designed, constructed and operated to remove SO₂ at an efficiency of 75 percent, or to not exceed a maximum emission rate of 29 ppmvd corrected to 7 percent O₂, 24-hour block geometric mean, whichever is less stringent.~~

c. ~~(3) Carbon Injection: The carbon injection rate must be estimated and maintained in compliance with the requirements set forth in 40 CFR 60.58b(m).~~

d. ~~(4) Selective Non Catalytic Reduction System: The facility shall be equipped with SNCRs which are designed, constructed and operated to not exceed a maximum NO_x emission rate of 205 ppmvd corrected to 7 percent O₂, 24-hour block arithmetic mean (midnight to midnight).~~

e. ~~(5) Within 30 days after it becomes available, but before commencement of construction, the permittee licensee shall submit to the Department's Southwest District office copies of technical data pertaining to the selected emission control systems. This data should include, but not be limited to guaranteed efficiency and emission rates, and major design parameters.~~

~~e. The height of the boiler exhaust stack shall not be less than 220 feet above grade.~~

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~~f. The primary fuel for the facility is municipal solid waste (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 (1995).~~

~~(1) 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 below. However, the facility shall not burn:~~

~~(a) those materials that are prohibited by state or federal law;~~

~~(b) those materials that are prohibited by this permit;~~

~~(c) lead acid batteries;~~

~~(d) hazardous waste;~~

~~(e) nuclear waste;~~

~~(f) radioactive waste;~~

~~(g) sewage sludge;~~

~~(h) explosives;~~

~~(2) 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:~~

~~(a) well mixed with MSW in the refuse pit; or~~

~~(b) alternately charged with MSW in the hopper.~~

~~(3) The facility owner/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 as in II.A.9.f.(6) and II.A.9.f.(7) below. 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 homogenous composition waste material as determined by visual inspection.~~

~~(4) 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.~~

~~(d) These steps shall be used to ensure and verify continuous compliance with the emissions limitations in this permit.~~

~~(5) 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. Subject to the conditions and limitations contained in this permit, the following other solid waste may be used as fuel at the facility:~~

~~(a) Confidential, proprietary or special documents (including but not limited to business records, lottery tickets, event tickets, coupons and microfilm);~~

~~(b) 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;~~

~~(c) Wood pallets, clean wood, and land clearing debris;~~

~~(d) Packaging materials and containers;~~

~~(e) Clothing, natural and synthetic fibers, fabric remnants, and similar debris, including but not limited to aprons and gloves; or~~

~~(f) Rugs, carpets, and floor coverings, but not asbestos containing materials or polyethylene or polyurethane vinyl floor coverings.~~

~~(6) 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 by using a rolling 30 day average in accordance with specific condition II.A.12.g below.~~

~~(7) Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility as 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 by using a rolling 30 day average in accordance with specific condition II.A.12.g below.~~

~~(a) Construction and demolition debris.~~

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

~~(c) 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.~~

~~(d) 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.~~

~~(e) Waste materials that:~~

- ~~i. are generated in the manufacture of items in categories (c) or (d), above and are functionally or commercially useless (expired, rejected or spent); or~~
- ~~ii. 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.~~
- ~~(f) Waste materials that contain oil from:~~
 - ~~i. the routine cleanup of industrial or commercial establishments and machinery; or,~~
 - ~~ii. spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.~~
- ~~(g) Used oil and used oil filters. Used oil containing a PCB concentration equal or greater than 50 ppm shall not be burned, pursuant to the limitations of 40 CFR 761.20(e).~~
- ~~(h) 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 prior approval of the Department.~~

~~g. Startup/Shutdown/Malfunctions~~

~~(1) The emission limitations for this facility shall apply at all times, except during periods of warm up, startup, shutdown, or malfunctions, provided that the duration of startup, shutdown, or malfunction periods does not exceed 3 hours per occurrence. The duration of warm up periods is not limited. The startup period commences when the affected facility begins the continuous burning of MSW and does not include any warm up period when the affected facility is combusting only natural gas and MSW is not being introduced to the combustor. The use of MSW solely to provide thermal protection to the grate during the warm up periods when MSW is not being fed to the combustor is not considered to be continuous burning. During all startups, shutdowns, and malfunctions, the owner/operator shall use best operational practices to minimize air pollutant emissions.~~

~~(2) A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Excess emissions that are caused entirely or in part by poor maintenance, careless operation, any other preventable upset condition, or preventable equipment breakdown shall not be considered malfunctions. Excess emissions resulting from startup, shutdown or malfunction of any source shall be permitted providing that: (1) best operational practices to minimize emissions are adhered to, and (2) the duration of excess emissions shall be minimized but in no case exceed 3 hours per occurrence.~~

5. h. Emissions Limiting Standards: The following maximum emissions limits shall not be exceeded:

POLLUTANT	EMISSION STANDARDS	LB/MMBtu	LB/HR	TON/YR
PM ⁽¹⁾ Particulate Matter	27 mg/dscm or 0.012 gr/dscf corrected to 7% O ₂	0.024	4.1	17.96
VE Visible Emissions	10% (6 min. block avg.)			
Cd Cadmium	0.040 mg/dscm corrected to 7% O ₂	3.47E-05	6.00E-03	0.026
F	6.74 mg/dscm corrected to 7 %	0.0059	1.00	4.43

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Fluorides	O ₂			
Be ⁽³⁾ Beryllium	1.48 µg/dscm corrected to 7% O ₂	1.27E-06	2.18E-04	9.6E-04
Pb Lead	0.44 mg/dscm corrected to 7% O ₂	3.81E-04	0.065	0.288
Hg ⁽⁵⁾ Mercury	70 µg/dscm or 85% reduction by weight corrected to 7% O ₂ (whichever is less stringent)	1.17E-04 or 85% reduction @ 7% O ₂	0.020 or 85% reduction @ 7% O ₂	0.087
SAM Sulfuric Acid Mist	To be initially shown not to exceed 0.072 gr/dscf corrected to 12% CO ₂			
SO ₂ ⁽⁵⁾ Sulfur Dioxide	29 ppmdv or 75% reduction by weight or volume corrected to 7% O ₂ (whichever is less stringent)	0.190 or 75% reduction @ 7% O ₂	32.86 or 75% reduction @ 7% O ₂	143.9
HCl ⁽⁵⁾ Hydrochloric Acid	29 ppmdv or 95% reduction corrected to 7% O ₂ (whichever is less stringent)	0.099 or 95% reduction @ 7% O ₂	17.00 or 95% reduction @ 7% O ₂	74.43
Dioxins/Furans	30 ng/dscm corrected to 7% O ₂	2.60 E-08	4.5E-06	1.96E-05
CO Carbon Monoxide	100 ppmdv corrected to 7% O ₂	0.101	17.4	76.26
NOx ⁽²⁾ Nitrogen Oxides	205 ppmdv corrected to 7% O ₂	0.34	58.63	256
VOC ⁽⁴⁾ Volatile Organic Compounds	To be demonstrated initially. Not to exceed 0.01 gr/dscf at 12%CO ₂			

Notes: These maximum allowable emission rates are applicable to each MWC combustor unit.

(1) This limit for PM/PM₁₀ is more restrictive than the emission limit for PM in 40 CFR 60.43b.

(2) The NOx standard of 40 CFR 60.44b does not apply to these emissions units because this permit certification subjects this facility to a federally enforceable requirement that limits the facility to an annual capacity factor of 10 percent or less for natural gas.

(3) Beryllium: NESHAP, 40 CFR 61.32 (a)(Subpart C). This limit is adjusted downward to produce no net increase in the annual maximum potential emission rate. Refer to Table 1.1 of the application submitted on September 16, 1997.

(4) VOC emission limit: 0.01 gr/dscf corrected to 12% CO₂ or 0.2 lb/ton, whichever is more restrictive (PSD-FL-104).

(5) Emission limits in terms of lbs/ MMBtu or lb/hr for those pollutants which have an emission standard expressed, in part by a percent removal efficiency, shall also be dictated by the percent removal provision.

Basis: Emissions calculations (lb/hr and ton/yr) are based on the maximum heat input rate of 172.5 MMBtu/hr (102,000 lb steam/hr) per unit and 8760 hours of operation.

Averaging Times:

SO₂: 24-hour daily block geometric mean (midnight to midnight)
NO_x: 24-hour daily block arithmetic mean (midnight to midnight)
CO: 4-hour block arithmetic mean beginning at midnight
Opacity: 6 minutes block arithmetic mean

Abbreviations:

µg/dscm: Micrograms per dry standard cubic meter
mg/dscm: Milligrams per dry standard cubic meter
ppmdv: Part per million dry volume
ng/dscm: Nanograms per dry standard cubic meter
Dioxins/furans: Total tetra-chlorinated through octa-chlorinated dibenzo-p dioxins and dibenzofurans
F: Fluorides as hydrogen fluoride

Temperature: 17° C above maximum demonstrated PM control device inlet

Auxiliary Burners: Nitrogen oxides emission from the auxiliary burners are expected to be approximately 3.45 lb/hr and 15.1 ton/yr per unit. These emissions are part of, and not in addition to, combustor emissions. Allowable emissions for MSW combustors include auxiliary burners. This facility is limited to a 10 percent (0.10) or less total annual gross heat input for natural gas consumption. Auxiliary burners for each MWC unit shall be fired only by natural gas, and consumption of natural gas shall not exceed 104,937,500 cubic feet per MWC unit in any calendar year (i.e., annual capacity factor for natural gas of 10% or less as determined by 40 CFR 60.44b(d)).

~~10. Compliance and Performance Testing~~

~~a. Testing shall be conducted in accordance with the requirements of 40 CFR 60.58b Compliance and Performance Testing and 40 CFR 60.8. Performance Tests.~~

~~b. Stack Testing~~

~~(1) Compliance tests [initial (I) and annual (A) as indicated in condition H.A.9.h] for PM, HCl, Dioxin/furans, F, Be, Pb, Cd, Hg, H₂SO₄ mist (SAM), VOC and VE shall be performed by using the following EPA reference methods as described in 40 CFR 60, Appendix A and/or 40 CFR 61 Appendix B adopted by reference in Chapter 62-204, F.A.C., or any other method as approved by the Department, in accordance with Chapter 62-297, F.A.C.~~

~~Method 5⁽⁴⁾ Determination of Particulate Matter Emissions (front half catch only) from Stationary Sources (I) and (A).~~

~~Method 8 Determination of Sulfuric Acid Mist from Stationary Sources (I).~~

~~Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources (I) and (A).~~

~~Method 13A or 13 B Determination of Total Fluoride Emissions from Stationary Sources (I) and (A).~~

~~Method 18, 25 or 25a Determination of Volatile Organic Concentrations (I).~~

~~Method 23⁽²⁾ Determination of Dioxin/furan concentration from Stationary Sources (I) and (A).~~

~~Method 26⁽²⁾ or 26A Determination of HCl emissions (I) and (A).~~

~~Method 29⁽²⁾ Determination of Metals Emissions from Stationary Sources (I) and (A).~~

NOTES: ¹ Pursuant to 40 CFR 60.58b(e)(3), EPA Reference Method 5 shall be used for determining compliance with the particulate matter emission limit. The minimum sample volume shall be 1.7 cubic meters. The probe and filter holder heating systems in the sample train shall be set to provide a gas temperature no greater than $160 \pm 14^\circ\text{C}$. An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 5 run.

² Dioxin/Furan emission limit expressed as the total mass of tetra through octa chlorinated dibenzo p dioxins and dibenzofurans. The facility may perform less frequent testing for dioxin/furan emissions, as allowed by 40 CFR 60.38b(b) and with prior notice to the Department, if the facility's dioxin/furan emissions do not exceed $15 \mu\text{g/dscm}$ corrected to 7% O_2 or less for all MWC units.

³ HCl and mercury stack tests upstream and downstream of the control device(s) shall be conducted to calculate percent control.

Initial compliance tests for each combustion unit shall be conducted within 60 days after achieving maximum operating capacity, but not later than 180 days after startup. Annual tests shall be conducted within one year after the initial tests, unless otherwise allowed by the Department.

(2) Stack tests may also require Method 1, 2, 3/3A/3B and 4 tests as appropriate.

(3) A test protocol shall be submitted for approval to the Department's Southwest District office and the Hillsborough County Environmental Protection Commission at least 45 days prior to initial testing.

(4) Pursuant to 40 CFR 60.58b(e)(3) EPA Reference Method 5 shall be used for determining compliance with the particulate matter emission limit. The minimum sample volume shall be 1.7 cubic meters. The probe and filter holder heating systems in the sample train shall be set to provide a gas temperature no greater than $160 \pm 14^\circ\text{C}$. An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 5 run.

(5) Dioxin/Furan emission limit expressed as the total mass of tetra chlorinated through octa chlorinated dibenzo p dioxins and dibenzofurans. The facility may perform less frequent testing for dioxin/furan emissions, as allowed by 40 CFR 60.38b(b) and with prior notice to the Department, if the facility's dioxin/furan emissions do not exceed $15 \mu\text{g/dscm}$ corrected to 7% O_2 or less for all MWC units.

(6) HCl and mercury stack tests upstream and downstream of the control device(s) shall be conducted to calculate percent control.

(7) Initial compliance tests for each combustion unit shall be conducted within 60 days after achieving maximum operating capacity, but not later than 180 days after startup. Annual tests shall be conducted within one year after the initial tests, unless otherwise allowed by the Department.

c. Test Procedures: Compliance tests shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapter 62-297, F.A.C. The Method 9 test shall be conducted during one run of the particulate matter test. The particulate matter test shall be conducted under conditions representative of normal operations and shall be scheduled to coincide with as much of the normal cleaning (soot blowing) cycle as practicable. Initial performance tests for SO_2 and NO_x shall be conducted using Continuous Emissions Monitoring Systems (CEMS) in accordance with the methods and requirements of 40 CFR 60.58b(e)(4) and (h)(3), respectively.

~~d. Stack Testing Facilities: The owner or operator shall install stack testing facilities in accordance with Rule 62-297.310(6), F.A.C. The owner or operator shall provide ports in the air pollution control equipment outlet duct or stack and shall provide access to the sampling ports.~~

~~e. Monitoring Compliance~~

a. (1) Continuous Compliance with Emission Limits: Continuous compliance with the emission limits for opacity, carbon monoxide (CO), nitrogen oxides (NO_x), sulfur dioxide (SO₂) listed in Title V Permit Specific Conditions C.15-31 and the operational parameters (steam production, etc.) listed in Title V Permit Specific Condition C.95 shall be demonstrated by CEMS operated in accordance with 40 CFR 60.58b and 60.59b(f).

b. (2) Compliance With Load Level Requirements: The owner or operator of an affected facility with steam generation capability shall install, calibrate, maintain, and operate a steam flow meter or a feedwater flow meter; measure steam (or feedwater) flow in kilograms per hour (or pounds per hour) on a continuous basis; and record the output of the monitor (in accordance with the ASME method described in 40 CFR 60.58b(i)(6)). Steam (or feedwater) flow shall be calculated in 4-hour block arithmetic averages. Higher loads are allowed for testing purposes as specified at 40 CFR 60.53b(b).

c. (3) Compliance with the Continuous Charging Rate: The daily solid waste charging rate and hours of operation shall be determined and recorded for each MWC unit. The daily charging rate shall be determined each month on an average daily basis for each MWC unit using the Facility's truck scale weight data, refuse pit inventory, and MWC operating data for the preceding calendar month. Monthly truck scale weight records on the weight of solid waste received and processed at the Facility and refuse pit inventory 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 per MWC unit for each day during the preceding calendar month.

d. (4) Compliance with the PM Control Device Temperature: Each MWC unit is required to continuously monitor and record the flue gas temperature at the inlet to the PM control device in accordance with the requirements at 40 CFR 60.58b(i)(7). The PM control device temperature shall be calculated in 4-hour block arithmetic averages. Each MWC unit shall be allowed to operate up to 17° C (30° F) above the unit's maximum demonstrated PM control device temperature. The maximum demonstrated PM control device temperature is the highest 4-hour arithmetic block-averaged measurement of temperature at the inlet to the PM control device recorded for 4 consecutive hours during the most recent dioxin/furan performance test which complied with the limits given above. The PM control device inlet temperature and the steam (or feedwater) flow for each unit during the stack test shall be continuously monitored and recorded in accordance with 40 CFR 60, Subpart Cb. Higher temperatures are allowed for testing purposes, as specified at 40 CFR 60.53b(c).

e. (5) Compliance with the Carbon Injection Rate: The carbon injection rate for each MWC unit (kilograms per hour [kg/hr] or pounds per hour [lb/hr]) shall be estimated during each mercury and dioxin/furan compliance stack test based on carbon injection system operating parameters such as the screw feeder speed, hopper volume, hopper refill frequency, or other parameters appropriate to the feed system being employed. During operation of each MWC unit, the carbon injection system operating parameter(s) that are the primary indicator(s) of carbon mass feed rate must equal or exceed the level(s) documented during the most recent mercury and dioxin/furan stack tests in which compliance with the emission limits were achieved. The owner or operator shall estimate the total carbon usage for the facility for each calendar quarter according to the weight of carbon delivered to the facility and the average carbon mass feed rate (kg/hr or lb/hr) for each MWC unit based on the primary indicator(s) for carbon mass feed rate, summing the results for all MWC units and accounting for the total number of operating hours during the calendar quarter.

~~(6) Auxiliary Burners Compliance:~~

~~f.~~ (a) Auxiliary burners for each unit shall be fired only by natural gas. The annual capacity factor for natural gas shall be 10 percent or less. Monthly records shall be maintained of the amount of natural gas used by the auxiliary burners in each unit and the equivalent gross heat input. On an annual basis (no later than 30 days after the end of the calendar year), a demonstration must be performed based on the monthly records showing that the capacity factor for natural gas in each unit was 10 percent or less. The annual capacity factor for natural gas is the ratio between the heat input to the unit from natural gas and the potential heat input to the unit had it been operated for 8760 hours during a calendar year at the maximum steady state design heat input capacity.

~~(b)~~ During boiler start up, the auxiliary gas burners shall be operating at their maximum capacity prior to the introduction of MSW to the boilers, and shall remain in operation until the lime spray dryer and particulate control device are fully operational.

~~11. Monitoring of Operations~~

~~a.~~ Continuous Emission Monitoring System (CEMS): CEMS with recorders shall be installed, calibrated, maintained and operated for each unit subject to review by the Department for the following pollutants and operational parameters:

- ~~Carbon Monoxide~~
- ~~Nitrogen Oxides~~
- ~~Opacity~~
- ~~Oxygen~~
- ~~Sulfur Dioxide (SO₂ monitors shall be located both upstream of the scrubber and downstream of the baghouse, in order to calculate percent removal efficiency).~~
- ~~Total steam production (lbs/hr, pressure, and temperature) or feedwater flow rate (lbs/hr)~~
- ~~Device to measure temperature of flue gases at the fabric filter inlet~~
- ~~Carbon injection system operating parameters~~
- ~~Power generation (MW)~~

~~b.~~ The monitoring devices shall meet the applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.45, and 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60.7(a)(5). Quality assurance procedures must conform to all applicable sections of 40 CFR, Appendix F. Data on CEM/COM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location after the economizer or in the air pollution control equipment outlet duct shall be provided to the Department's Southwest District Office and the Hillsborough County Environmental Protection Commission for review at least 90 days prior to installation. Initial performance evaluations must be completed within 180 days after initial startup of each retrofitted unit.

~~12. Record Keeping and Reporting Requirements~~

~~a.~~ All measurements, records, and other data (test reports, etc.) required to be maintained by this facility shall be retained for at least five (5) years following the data on which such measurements, records, or data are recorded. These data shall be made available to the Department of Environmental Protection, Southwest District office and the Hillsborough County Environmental Protection Commission upon request.

~~b.~~ 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:

_____ (1) _____ Data collected from monitoring instruments, including CEM/COM systems, steam or feedwater flow measurements and PM control device temperatures;

_____ (2) _____ Continuous steam flow or feedwater flow records on 4 hour block average basis;

_____ (3) _____ Records on daily solid waste charging rates and hours of operation derived from monthly truck scale data, refuse pit inventory, and operational records;

_____ (4) _____ Amount of natural gas burned for each unit each month; the equivalent heat input from natural gas for each unit each month, calculated using the heat value for natural gas provided by the natural gas supplier; and the annual records of the natural gas capacity factor for each unit;

_____ (5) _____ Results of all source tests or performance tests, and records of the maximum demonstrated unit load specified by condition B.3 of this permit.

_____ (6) _____ Amounts of activated carbon used for mercury control;

_____ (7) _____ Calibration logs for all instruments subject to this permit;

_____ (8) _____ Maintenance/repair logs for any work performed which is subject to this permit;

_____ (9) _____ 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;

_____ (10) _____ Records demonstrating compliance with the percentage limitations on segregated solid wastes required by specific condition B.25 of this permit.

_____ c. _____ Excess Emission Reports

_____ (1) _____ Quarterly Reports: The owner or operator shall submit excess emission reports for any calendar quarter during which there are excess emissions from the facility pursuant to 40 CFR 60.7(e). 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 during the quarterly reporting period. The report shall include the following:

_____ (a) _____ The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions.

_____ (b) _____ Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted.

_____ (c) _____ The date and time identifying each period during which the continuous monitoring system (CEM/COM) was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

_____ (d) _____ When no excess emissions have occurred or the continuous monitoring system (CEM/COM) has not been inoperative, repaired, or adjusted, such information shall be stated in the report [40 CFR 60.7(e)(4)]. In case of excess emissions resulting from malfunctions, the owner or operator shall

notify the Department and the Hillsborough County Environmental Protection Commission in accordance with Section 62-4.130, F.A.C.

~~(2) Other Excess Emission Reports: In case of excess emissions resulting from malfunctions, the owner or operator shall notify Department's Southwest District office and the Hillsborough County Environmental Protection Commission in accordance with Section 62-4.130, F.A.C. The Department's Southwest District office and the Hillsborough County Environmental Protection Commission shall be notified within one working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department's Southwest District office or the Hillsborough County Environmental Protection Commission may request a written summary report of the incident. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department's Southwest District office or the Hillsborough County Environmental Protection Commission.~~

~~Malfunction is defined at Rule 62-210.200(179) to mean any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.~~

~~d. Continuous Emission Monitoring System Reports: For CEM and other monitoring systems required by this permit, data on monitoring equipment specifications, manufacturer, type, calibration and maintenance needs, and proposed location shall be provided to the Department's Southwest District office and the Hillsborough County Environmental Protection Commission for review at least 90 days prior to installation.~~

~~e. Operating Reports: Before March first of each year, the owner or operator shall submit to the Department's Southwest District office and the Hillsborough County Environmental Protection Commission the Annual Operating Report [DEP Form No. 62-210.900(5)], which summarizes operations for the previous calendar year. No later than February first of each year, the owner or operator shall submit an annual report for the previous calendar year including the information required by 40 CFR 60.59b(g)(1) through (4), as applicable. In addition, if applicable, the owner or operator shall submit to the Department and the Hillsborough County Environmental Protection Commission offices the information required in 40 CFR 60.59b(h) on a semiannual basis.~~

~~f. Sampling Reports: Drawings of testing facilities including sampling port locations as required by Section 62-297.310(8)(c), F.A.C. shall be submitted to the Department's Southwest District Office at least 60 days prior to construction of the sampling ports.~~

~~g. Segregated Solid Waste Record Keeping: The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of specific condition II.A.9.f:~~

~~(1) Each segregated load of non-MSW materials, that is subject to the percentage weight limitation of specific conditions B.6.6 and B.6.7, which is received for processing shall be documented as to waste description and weight. The weight of all waste materials received for processing shall be measured using the facility truck scale and shall be recorded.~~

~~(2) 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 29 days. The resultant 30 day total weight of tires shall be divided by the total weight of all waste materials received in the same 30 day period, 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.~~

~~(3) 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 29 days. The resultant 30 day total weight of segregated non-MSW materials shall be~~

divided by the total weight of all waste materials received in the same 30 day period, 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.

13. Operator Training and Certification

a. Requirements

(1) One of the following persons must be on duty at the facility at any time during which one or more of the MWC units is operating: a fully certified chief facility operator or shift supervisor; or a provisionally certified chief facility operator or shift supervisor who is scheduled to take the full certification exam. If this person must leave the facility during his or her operating shift, a provisionally certified control room operator who is on site may fulfill this requirement.

(2) Each chief facility operator and shift supervisor must obtain and maintain a current provisional operator certification and be scheduled for a full certification exam, or receive full certification, with either the ASME or an equivalent state approved certification program before the date that person assumes responsibility for operation of the facility.

(3) Each chief facility operator, shift supervisor, and control room operator must complete the EPA or state approved MWC operator training course before the date that person assumes responsibility for operation of the facility. The operator training course requirements of 40 CFR 60.54b(d) do not apply to chief facility operators, shift supervisors and control room operators who have obtained full ASME certification on or before the date of State plan approval of November 13, 1997 [40 CFR 60.39b(c)(4)(iii)(A)]. The owner or operator may request that the Department waive the requirements specified in 40 CFR 60.54b(d) for chief facility operators, shift supervisors and control room operators who have obtained provisional ASME certification on or before the date of State plan approval of November 13, 1997 [40 CFR 60.39b(c)(4)(iii)(B)].

(4) A site specific operating manual must be developed and updated on an annual basis [40 CFR 60.54b(e)]. A training program must be established to review the operating manual with each person who has responsibilities affecting the operation of the MWC including chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers. Each person must undergo initial training before the day that person assumes responsibilities affecting operation of the facility and annually thereafter [40 CFR 60.54b(f)]. The operating manual must be kept in a readily accessible location for all persons required to undergo training.

14. The Following Specific Conditions Apply To:

Emissions Unit No.	EMISSIONS UNITS DESCRIPTION
xxx	Ash Building and Handling System
xxx	Lime Silo
xxx	Carbon Silo

a. Emissions Limitations

(1) In no case shall PM emissions from the lime storage silos exhaust exceed 0.015 gr/dscf (front half catch) during filling operations of the lime storage silo. Visible emissions shall not exceed 5% opacity in accordance with specific condition II.A.14.b.

~~(2) In no case shall particulate matter emissions from the activated carbon storage silo exhaust exceed 0.015 gr/dscf (front half catch) during filling operations of the activated carbon storage silo. Visible emissions shall not exceed 5% opacity in accordance with specific condition II.A.14.b.~~

~~(3) Visible emissions from the ash conveyor systems, transfer points, buildings, or enclosures of ash conveying systems shall not occur more than 5 percent of the time during the observation period, except during times of maintenance or repair of these systems.~~

~~(4) The potential for dust generation by ash handling activities will be mitigated by quenching the ash prior to loading in 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 to minimize visible dust.~~

~~(5) The ash/residue in the Ash Handling Building shall remain sufficiently moist to prevent dust during storage and handling operations.~~

~~(6) PM emissions from the ash handling facility baghouse shall not exceed 1.63 pounds per hour. Visible emissions shall not exceed 5 percent opacity in accordance with specific condition II.A.14.b.~~

~~{Note: The fugitive particulate matter control requirements for the ash handling activities specified in 40 CFR 60.55b and in this permit represent RACT for this facility pursuant to the Department's authority under Rule 62-296.711(2)(c), F.A.C.}~~

~~b. Compliance and Performance Testing~~

~~(1) Fugitive Emissions Compliance:~~

~~(a) The compliance method for fugitive emissions from ash handling facilities shall be EPA Method 22, Visual Determination of Fugitive Emissions From Material Sources.~~

~~(b) The minimum observation time will be three hours, and will include periods when ash is being transferred from the MWC unit to the storage area, and when ash is being loaded for disposal.~~

~~(c) Compliance testing for the ash handling and ash conveyor systems shall be conducted within 180 days of completion of construction and initial operation and annually thereafter. All notification requirements of 40 CFR Part 60 shall be satisfied.~~

~~(2) Carbon and Lime Storage Silos and Ash Building Baghouse PM Compliance Requirements:~~

~~(a) Pursuant to Section 62-297.620(4), F.A.C., the PM compliance test requirements are waived for the lime and carbon storage silos and ash building baghouse and an alternate standard of 5 percent opacity shall apply.~~

~~(b) Visible emission tests shall be performed for each silo during filling operations and the ash handling baghouse using EPA Method 9.~~

~~(c) A visible emission reading greater than 5 percent opacity does not create a presumption that the emission limit (in gr/dscf) is being violated, but may require the permittee to perform a particulate stack test using EPA Method 5.~~

~~(d) Compliance testing for the lime and carbon silos and ash handling building baghouse shall be conducted within 180 days of completion of construction and initial operation and annually thereafter.~~

~~(e) All notification requirements of 40 CFR 60 shall be satisfied.~~

~~15. The Following Common Conditions Apply To:~~

EMISSIONS UNIT NO.	EMISSIONS UNITS DESCRIPTION
001	150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners - Unit No.1
002	150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners - Unit No.2
003	150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners - Unit No.3
xxx	Ash Building and Handling System
xxx	Lime Silo
xxx	Carbon Silo

~~a. Operational Requirements~~

~~(1) These emissions units are allowed to operate continuously (8760 hours/year).~~

~~(2) Odor Control: No objectionable odors are allowed from this facility. The truck access doors to the facility shall remain closed except during normal working shifts when MSW is being received at the storage pit area. To minimize odors at the facility, a negative pressure shall be maintained on the tipping floor and air from within the building will be used as combustion air.~~

~~(3) Startup/Shutdown/Malfunctions~~

~~(a) In order to minimize excess emissions during startup/shutdown/ malfunction these emissions units shall adhere to best operational practices to minimize emissions.~~

~~(b) The duration of excess emissions from the lime silo, carbon silo or ash building baghouse shall be minimized but in no case exceed 2 hours per occurrence.~~

~~(c) 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.~~

~~(d) Within 90 days prior to completion of the construction authorized in this permit, the permittee shall submit to the Department's Southwest District office an operational procedures manual that identifies and describes best operational practices that will be used during startup, shutdown, and malfunctions of this facility.~~

~~b. Emissions Limitations~~

~~(1) Facility Fugitive (Unconfined) Emissions: Fugitive emissions at this facility shall be adequately controlled at all times. All roads shall be adequately paved, and vacuum swept if appropriate, to avoid accumulations of ash.~~

~~(2) Speed limit signs shall be posted.~~

~~c. Compliance and Performance Testing~~

~~(1) Test Notification: The owner or operator shall notify the Department's Southwest District office and the Hillsborough County Environmental Protection Commission in writing at least 30 days (initial) and 15 days (annual) prior to each scheduled compliance test to allow witnessing. The notification shall include the compliance test date, place of such test, the expected test time, the facility contact person for the test, and the person or company conducting the test. The 30 or 15 day notification requirement may be waived at the discretion of the Department. Likewise, if circumstances prevent testing during the test window specified for the emissions unit, the owner or operator may request an alternate test date before the expiration of this window.~~

~~(2) Special Compliance Tests: When the Department, after investigation, has good reason (such as substantiated complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in Rule 62-204, 62-210, 62-212, 62-296 or 62-297, F.A.C. or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the facility to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions units and to provide a report on the results of said tests to the Department Southwest District office and the Hillsborough County Environmental Protection Commission.~~

~~(3) Operating Rate During Testing: Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operation at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity. In this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Higher loads are also allowed for testing purposes as specified at 40 CFR 60.53b(b). See also specific conditions B.2, B.3, and B.13 of this permit.~~

~~d. Record Keeping and Reporting Requirements~~

~~(1) Emission Compliance Stack Test Reports:~~

~~(a) A test report indicating the results of the required compliance tests shall be filed with the Department's Southwest District office and the Hillsborough County Environmental Protection Commission as soon as practical, but no later than 60 days after the last sampling run is completed.~~

~~(b) The test report shall provide sufficient detail on the tested emissions unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C.~~

~~e. Schedule of Compliance~~

~~(1) The compliance schedule for each unit is provided below.~~

~~(a) Increment 1: Submittal of a final control plan for the designated facility to the appropriate air pollution control agency. December 31, 1996; applicable to units 1, 2 and 3.~~

~~(b) Increment 2: Awarding of contracts for emission control systems or for process modifications, or issuance of orders for the purchase of component parts to accomplish emission control or process modification. December 31, 1997; applicable to units 1, 2 and 3.~~

~~(c) Increment 3: Initiation of on site construction or installation of emission control equipment or process change. February 28, 1999 applicable to the first unit. July 30, 1999; applicable to the second unit. April 30, 2000; applicable to the third unit.~~

~~The order of the construction schedule (i.e., which unit is first, second and third) will be identified in the final control plan.~~

~~(d) Increment 4: Completion of on-site construction or installation of emission control equipment or process change. September 30, 2000; applicable to units 1, 2 and 3.~~

~~(e) Increment 5: Final compliance. December 10, 2000; applicable to units 1, 2 and 3.~~

~~(2) Closure Agreement: Not later than November 13, 2000, the County will cease operation of any unit that has not completed on-site construction or installation of emission control equipment and is not involved in performance testing. After closure, said units may commence startup, shakedown and performance/compliance testing per the closure agreement. Performance/ compliance tests must be completed within 180 days of startup.~~

~~16. General Conditions~~

~~a. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, and 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.~~

~~b. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.~~

~~c. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.~~

~~d. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.~~

~~e. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted~~

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source, or from penalties therefor; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

f. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

g. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time (reasonable time may depend on the nature of the concern being investigated), access to the premises, where the permitted activity is located or conducted to:

(1) Have access to and copy any records that must be kept under the conditions of the permit;

(2) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,

(3) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

h. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

(1) A description of and cause of non-compliance; and the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

(2) The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

i. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

j. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

k. This permit is transferable only upon Department approval in accordance with Rules 62.4.120 and 62.730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

l. This permit or a copy thereof shall be kept at the work site of the permitted activity.

m. This permit also constitutes:

- ~~_____ (1) Determination of Best Available Control Technology;~~
- ~~_____ (2) Determination of Prevention of Significant Deterioration ;~~
- ~~_____ (3) Compliance with New Source Performance Standards.~~

~~_____ n. The permittee shall comply with the following:~~

~~_____ (1) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.~~

~~_____ (2) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.~~

~~_____ (3) Records of monitoring information shall include:~~

- ~~_____ (a) The date, exact place, and time of sampling or measurements;~~
- ~~_____ (b) The person responsible for performing the sampling or measurements;~~
- ~~_____ (c) The dates analyses were performed;~~
- ~~_____ (d) The person responsible for performing the analyses;~~
- ~~_____ (e) The analytical techniques or methods used; and~~
- ~~_____ (f) The results of such analyses.~~

~~_____ o. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.~~

~~B. Vacant~~

- ~~C.B. Cooling Tower~~
- ~~D.C. Water Discharges~~
- ~~E.D. Operational Safeguards~~
- ~~F.E. Transmission Lines~~
- ~~G.F. Noise~~

Any party to the this Order has a right to seek judicial review of it pursuant to Section 120.68, Florida Statutes by filing a Notice of Appeal, pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection in the Office

Hillsborough County Resource Recovery Facility
Order Modifying Conditions of Certification
DEP Case Number PA 83-19D
May 20, 2005

of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, Tallahassee, Florida 32399-3000, and by filing a copy of the Notice of Appeal, accompanied by the applicable filing fees, with the appropriate District Court of Appeal. The Notice of Appeal must be filed within thirty days from the date this Order is filed with the Clerk of the Department of Environmental Protection.

Executed in Tallahassee, Florida.

Hamilton S. Oven

Hamilton S. Oven, P.E.

Administrator, Siting Coordination Office

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52
Florida Statutes, with the designated
Department Clerk, receipt of which is
hereby acknowledged.

Janda Korakous 5/20/05
Clerk Date

Hillsborough County Resource Recovery Facility
Order Modifying Conditions of Certification
DEP Case Number PA 83-19D
May 20, 2005

CC by certified mail:

James Antista, Esquire
Fish and Wildlife Conservation Commission
6230 South Meridian Street
Tallahassee, FL 32399-1600

Mary Ann Helton, Esquire
Florida Public Service Commission
Gerald Gunter Building
2450 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Martha Moore, Esquire
Southwest FL Water Mngt. Dist.
2379 Broad Street
Brooksville, FL 34609-6899

Patricia G. Bean
County Administrator
County Center, 26th Floor
601 E. Kennedy Blvd.,
Tampa, FL 33602

Craig Varn, Esquire
Department of Community Affairs
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100

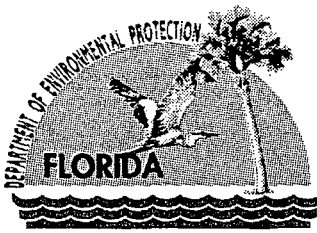
Sheauching Yu, Esquire
Department of Transportation
Haydon Burns Building
605 Suwannee Street
Mail Station 58
Tallahassee, FL 32399-0450

Michael Cooke
Division of Air Resource Management
2600 Blair Stone Road MS 5500
Tallahassee, Florida 32399-2400

Daryl Smith,
Director, Solid Waste Management Dept.
24th Floor, County Center
601 E. Kennedy Blvd.
Tampa, Florida 33602

And by hand delivery to:

Scott A. Goorland, Esquire
Department of Environmental Protection
3900 Commonwealth Blvd.
Mail Station 35
Tallahassee, FL 32399-3000



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

05/20/05

- CERTIFIED MAIL - RETURN RECEIPT REQUESTED -

Christopher M. Carey
General Manager
Wheelabrator South Broward Inc.
4400 South State Road 7
Ft. Lauderdale, FL 33314

**RE: Wheelabrator South Broward, Inc.
South Broward County Resource Recovery
Modification to Conditions of Certification
DEP Case Number PA 85-21F
OGC Case Number 05-0430**

RECEIVED

MAY 23 2005

DIVISION OF AIR
RESOURCE MANAGEMENT

FINAL ORDER MODIFYING CONDITIONS OF CERTIFICATION

Dear Mr. Carey:

On December 8, 2004, the Department of Environmental Protection (DEP) issued a final Title – V permit revision (No. 0112119-008-AV) for South Broward County Resource Recovery Facility (Wheelabrator). Review of the Conditions of Certification for Wheelabrator indicated that a modification would be necessary.

On or before April 8, 2005 all parties to the certification proceeding were provided with notice by certified mail of the Department's intent to modify the Conditions of Certification for this facility, along with a copy of the proposed Order Modifying Conditions of Certification. Additionally, on April 8, 2005, notice of the Department's intent to modify the Conditions of Certification for this facility was published on the Department's internet home page at <http://www.dep.state.fl.us/> under the link or button titled "Official Notices." Those notices specified that pursuant to Section 403.516, Florida Statutes ("F.S."), and Rule 62-17.211, Florida Administrative Code ("F.A.C."), all parties to the certification proceeding have 45 days from the issuance of notice by mail to such party's last address of record in which to file a written objection to the modification; that any person who is not already a party to the certification proceeding and whose substantial interests will be affected by the requested modification has 30 days from the date of publication of the public notice on the Department's internet home page to object in writing; that failure to act within the time frame constitutes a waiver of the right to become a party; and that the Department will issue an Order Modifying the Conditions of Certification for this facility if no written objections are received by the Department.

No objections to the modification have been received by the Department. The Conditions of Certification for South Broward County Resource Recovery Facility are hereby modified as follows:

"More Protection, Less Process"

Page 1 of 21

Printed on recycled paper.

- All reference to 'permittee' is changed to licensee

III. FACILITIES OPERATION

The ~~Permittee~~ Licensee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems used by the ~~Permittee~~ Licensee to achieve compliance with the terms and conditions of this certification. Stoppages of landfill operations induced by weather conditions shall be allowed until the weather permits operations to resume. In the event of a malfunction of a resource recovery boiler's pollution control system, that unit's furnace emissions must be shifted to the extent feasible to one or both of the remaining units having a properly functioning pollution control system. In the event of a prolonged (thirty (30) day or more) equipment malfunction or shutdown of air pollution control equipment, operation could be permitted to continue to take place under a consent order, only if the ~~Permittee~~ Licensee demonstrates that such operation will be in compliance with all applicable ambient air quality standards and PSD increments, solid waste rules, domestic waste rules and industrial waste rules.

Additionally, during such malfunction or shutdown, the source shall comply with all other requirements of this certification and all applicable state and federal emission standards not affected by the malfunction or shutdown which is the subject of the consent order. Administrative action will not be initiated in the event of such a malfunction for 25 days following a malfunction unless there is an imminent health threat. However, if at thirty (30) days following a malfunction compliance has not been achieved by the source, an Order for Corrective Action may be immediately imposed upon the Applicant, subject to the provisions of Chapter 120 of the Florida Statutes. Unless otherwise authorized by these Conditions of Certification, excess air pollutant emissions during start-up, malfunction or shutdown exceeding the emission limitations set forth herein shall not be permitted to occur for longer than three (3) hours without Southeast District Office approval. Operational stoppages exceeding four (4) hours and as defined in the operational contingency plans as specified in Condition XVII are to be reported as specified in Condition II. Identified operational malfunctions which do not stop operation but do compromise the integrity of the operation shall be reported to the Southeast District Office as specified in Condition II.

A.I. Operational Safeguards

The overall design and layout of the facilities shall be such as to mitigate potential adverse effects to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction and operation. The safety standards specified under Section 440.56, Florida Statutes, by the Industrial Safety Section of the Florida Department of Commerce will be complied with during operation.

B.K. Noise

Operational noises shall not exceed local noise ordinance limitations nor those noise standards imposed by zoning.

XIV. OPERATION AIR

A. Air General and Administrative Requirements

1. All documents related to applications requesting permission to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation, MS 5500, Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, telephone (850) 488-1344, and the Siting Coordination Office, MS 48, Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, telephone (850) 487-0472245-8001. All documents related to reports, tests, and notifications should be submitted to the Department's Southeast District office, 400 N Congress Avenue, Suite 200 West Palm Beach, Florida 33401, phone number (561)681-6600.

2. The operation of the Resource Recovery Facility shall be in accordance with all applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-256, 62-296, 62-297, 62-701, and 62-702, Florida Administrative Code, and permit PSD-FL-105(B) as amended. The terms, conditions, requirements, limitations, and restrictions set forth in Final Title V Permit No. 0112119-008-AV, which is attached as Appendix A to these Conditions, and any modification or amendment to such Title V permit, are incorporated by reference herein, and are binding and enforceable Conditions of this Certification. The licensee is subject to and shall comply with the terms, conditions, requirements, limitations, restrictions set forth in Appendix A. A violation of the terms conditions, requirements, limitations and restrictions in Appendix A is a violation of these Conditions of Certification. ~~In addition to the foregoing, the Permittee shall comply with the following specific Conditions of Certification:~~

3. The Department is delegated the authority to modify these Conditions of Certification to conform them to any subsequently issued amendment or modification to Permit No. 0112119-008-AV, pursuant to Condition XII.B

4. The provisions set forth in Conditions XIV.B, C, and D are excerpted from Permit Title V - 0112119-008-AV.

5. Records shall be made and kept to demonstrate compliance in accordance with Title V permit special conditions **B.89-111**.

B. Emission Units

1. **Emissions Units 001, 002, and 003** ~~Limitations upon Operation of Units 1-3~~
a. Description: Each of the three municipal waste combustors (MWCs) has a nominal design rate capacity of 750 tons MSW per day and 281 MMBtu per hour heat input (with MSW having a heating value of 4,500 Btu per pound). A maximum (short-term) capacity of 863 tons of waste per day and 323.6 mmBtu per hour heat input (115% rated capacity) is allowed. Short-term capacity is limited by limiting steam production, which effectively limits heat input. The maximum steam production rate is 192,000 lbs/hr, with a net steam energy of 5,600 Btu/lb of steam (the net steam energy may be calculated as the difference in enthalpy between the steam at the superheater outlet and the feedwater at the inlet).~~The following emissions standards apply to the following units after improvements to comply with 40 CFR 60 Subpart Cb are completed, and the initial~~

performance tests are completed. [Rule 62-204.800(8)(b), F.A.C., and 40 CFR 60 Subpart Cb]. The units are described as follows:

E.U. ID No.	Brief Description
-001	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 1
-002	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 2
-003	863 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 3

EMISSIONS UNIT NO.	EMISSIONS UNIT DESCRIPTION
001	323.6 MMBtu/hr (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit No. 1
002	323.6 MMBtu/hr (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit No. 2
003	323.6 MMBtu/hr (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit No. 3

b. Fuels and Capacity: The primary fuel for this facility is municipal solid waste (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), F.S. The authorized fuels for the facility also include the other solid wastes that are not MSW which are described in specific condition B.15 of the Title V Permit (Appendix A).

Each municipal waste combustor (MWC) unit shall have a maximum capacity of 192,000 pounds of steam produced per hour based on a 4-hour block averaged measurement. The maximum individual MWC throughput shall not exceed 863 tons MSW per day (2,589 tons per day entire facility) and 323.6 MMBtu/hr (115% rated capacity), as determined monthly (see Title V Permit specific condition B-109).

c. Controls: Pollution control equipment includes the following for each boiler:

- (1) A particulate emission control device for the control of particulates.
- (2) An acid gas control device designed to remove at least 90% of the acid gases.
- (3) A selective non-catalytic reduction system to control nitrogen oxides emissions.
- (4) Mercury is controlled by source separation techniques pursuant to Rule 62-296.416,

F.A.C. [PSD-FL-105(B)].

2. Emissions unit-004

A 236 ton capacity silo for 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 Wheelabrator Air Pollution Control Jet III baghouse (Model No. 1016, BA-108) is used to control particulate matter emissions during silo filling. The baghouse parameters are as follows: stack height = 102 feet; exit dimensions (rectangular vent) = 2.67 x 1 feet; exit temperature = 40-100 °F, actual volumetric flow rate = 1,500 acfm. The initial startup date of the silo was February, 1992.

3. Emissions unit-005

a. Ash Handling System:

It receives fly ash and spray dryer reaction products (calcium sulfate, calcium chloride, calcium hydroxide, calcium fluoride). Particulate matter and visible emissions from the ash handling system are controlled by wet processing in an enclosed building. The initial startup date of the ash handling system was April 5, 1991.

b. Ash Handling Facilities:

The potential for dust generation by ash handling activities will be mitigated by quenching of conditioning the ash prior to loading in ash transport trucks. Ash handling facilities shall be enclosed (including the proposed future metal recovery area). 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 and grate siftings shall discharged into the bottom ash quenching system, and ash from the combustor/boiler and fabric filter hoppers shall be discharged into the fly ash conditioning system during normal operations to minimize visible dust generation. The ash/residue in the Ash Handling Building shall remain sufficiently moist to minimize dust during storage and handling operations. Compliance with this condition shall be determined in accordance with Condition XIV.A.1.(1)(b). [Rules 62-204.800(8)(b) and 62-4.070(3), F.A.C., 40 CFR 60.36b and 60.55b]

4. Continuous Monitors

For each boiler, the Licensee shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring carbon monoxide at the combustor outlet and record the output of the system as well as the following:

a. The continuous emission monitoring system shall be operated according to Performance Specification 4A in Appendix B of 40 CFR 60.

b. During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 4A in Appendix B of 40 CFR 60, carbon monoxide and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (A) and(B).

(1) For carbon monoxide, EPA Reference Method 10, 10A, or 10B shall be used.

(2) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A, or 3B, as applicable shall be used.

(3) The span value of the continuous emission monitoring system shall be 125 percent of the maximum estimated hourly potential carbon monoxide emissions of the municipal waste combustor unit.

5. Metal Recovery Facility

A metal recovery area may be constructed and shall be enclosed in a building adjacent to the existing ash loadout area. All bottom ash is currently quenched with water after leaving each boiler. All bottom ash shall continue to be quenched after leaving each boiler so that the resulting bottom ash will contain approximately 20 to 30 percent moisture and will not generate fugitive dust. Ash being processed at this facility shall continue to meet the requirements of XIV.B.3.

C. Emissions Limiting Standards

1. Emissions Limits Standards:

~~{Permitting Note: Each of the three municipal waste combustors (MWCs) has a nominal design rate capacity of 750 tons MSW per day and 281 MMBtu per hour (with MSW having a heating value of 4,500 Btu per pound). A maximum capacity of 863 tons per day and 323.6 MMBtu per hour heat input (115%-rated capacity) is allowed. Short term capacity is limited by limiting steam production (maximum of 192,000 lb/hr), which effectively limits heat input.}~~

EQUIVALENT EMISSIONS ²				
POLLUTANT	EMISSIONS STANDARDS ¹	LBS/MMBtu	LBS/HR	TONS/YR
PM ³ Particulate Matter	27 mg/dscm or 0.012 gr/dscf corrected to 7% O ₂	0.0243	7.85	34.4
VE Visible Emissions	10% (6 minute block average)			
Cd Cadmium	0.040 mg/dscm corrected to 7% O ₂	3.7E-05	0.012	0.051
Be ⁴ Beryllium	0.001 mg/dscm corrected to 7% O ₂	9.3E-07	0.0003	0.0013
Pb Lead	0.44 mg/dscm corrected to 7% O ₂	4.4E-04	0.142	0.62
Hg Mercury	70 µg/dscm or 85% reduction by weight or volume corrected to 7% O ₂ (whichever is less stringent)	6.2E-05	0.02	0.09
SO ₂ Sulfur Dioxide	29 ppmv or 75% reduction by weight or volume corrected to 7% O ₂ (whichever is less stringent)	0.11	35.1	153.7
HCl Hydrochloric Acid	29 ppmv or 95% reduction corrected to 7% O ₂ (whichever is less stringent)	0.04	12.6	55
Dioxins/Furans	30 ng/dscm corrected to 7% O ₂	2.7E-08	8.7E-06	3.8E-05
NOx Nitrogen Oxides	205 ppmv corrected to 7% O ₂	0.352	114	499
CO Carbon Monoxide	100 ppmv corrected to 7% O ₂	0.105	33.9	148.5
F Fluorides	Not to exceed 0.0040 lb/MMBtu (BACT limit from original permit)	0.0040	1.29	5.66

1. These maximum allowable emission standards are applicable to each MWC unit and shall be used in demonstrating compliance with the compliance procedures specified in specific condition XIV.A.1.e. [Rules 62-4.070 and 62-296.416, F.A.C., 40 CFR 60.33b and 40 CFR 60.34b].
2. Permitting note: These equivalent emissions are listed for the purposes of providing information on the potential to emit for each MWC and not in determining compliance with applicable emission standards.
3. This limit for PM is more restrictive than the emission limit for PM in 40 CFR 60.43b.
4. Beryllium: PSD original permit limit. Not to exceed applicable NESHAP, 40 CFR 61.32(a)(Subpart C).

Basis: Equivalent emissions calculations (lb/hr and ton/yr) are based on the maximum heat input rate of 323.6 MMBtu/hr [115% rated capacity] per unit and 8760 hours of operation. Short-term capacity is limited by limiting steam production (maximum of 192,000 lb steam/hr) which effectively limits heat input.

Averaging Times

SO₂: 24-hour daily block geometric mean (midnight to midnight)
NO_x: 24-hour daily block arithmetic mean (midnight to midnight)
CO: 4-hour block arithmetic mean beginning at midnight

Opacity: 6 minutes block arithmetic mean

Abbreviations

µg/dscm: Micrograms per dry standard cubic meter
mg/dscm: Milligrams per dry standard cubic meter
ppmdv: Parts per million dry volume
ng/dscm: Nanograms per dry standard cubic meter
Dioxins/furans: Total tetra through octa-chlorinated dibenzo-p dioxins and dibenzofurans
F: Fluorides as hydrogen fluoride

Temperature: 17° C above maximum demonstrated PM control device inlet

~~(1) Visible Emissions:~~

~~(a) Excess Emissions~~

~~Excess opacity resulting from startup or shutdown shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess opacity shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.~~

~~Emission standards apply at all times except during periods of startup/shutdown and malfunction as stated in 40 CFR 60.58b(a).~~

~~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 start up or shut down shall be prohibited.~~

~~(b) Fugitive Ash Emissions From Ash Conveying Systems:~~

~~No owner or operator of this 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% of the observation period (i.e., nine minutes per 3-hour period) as determined by EPA Reference Method 22. The five (5) percent visible ash emission limit does not cover visible ash emissions discharged inside a building or ash conveying systems, but the visible emission limit does cover visible emissions discharged to the atmosphere from buildings of enclosures of ash conveying systems (including conveyor transfer points). [Rules 62-204.800(8)(b) and 62-4.070(3), F.A.C., 40 CFR 60.36b and 60.55b]~~

~~(c) Applicable Requirements:~~

~~These units are subject to all applicable requirements of 40 CFR 60 Subpart Cb, "Emissions Control Guidelines and Compliance Schedules for Municipal Solid Waste Combustors," Subpart E, "NSPS for Incinerators," Subpart Db, "NSPS for Industrial Commercial Institutional Steam Generating Units," 40 CFR 61 Subpart C, "NESHAP for Beryllium," and Rule 62-296.416, F.A.C., Waste to Energy Facilities, except that where requirements in these Conditions of Certification are more restrictive, the requirements in these Conditions of Certification shall apply. [PSD FL 105(B), 40 CFR 60 Subparts Cb, E, Db, and 40 CFR 61 Subpart C]~~

~~(d) Ash Handling Facilities:~~

~~The potential for dust generation by ash handling activities will be mitigated by quenching or conditioning the ash prior to loading in ash transport trucks. Ash handling facilities shall be enclosed (including the proposed future metal recovery area). 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 and grate siftings shall be discharged into the bottom ash quenching system, and ash from the combustor/boiler and fabric filter hoppers shall be discharged into the fly ash conditioning system during normal operations to minimize visible dust generation. The ash/residue in the Ash Handling Building shall remain sufficiently moist to minimize dust during storage and handling operations. Compliance with this condition shall be determined in accordance with Condition XIV.A.1.(1)(b). [Rules 62-204.800(8)(b) and 62-4.070(3), F.A.C., 40 CFR 60.36b and 60.55b]~~

~~(2) Only distillate fuel oil or natural gas shall be used in startup burners. The annual capacity factor for use of natural gas and oil, as determined by 40 CFR 60.43b(d), shall be less than 10%. If the annual capacity factor of natural gas is greater than 10%, then the facility shall be subject to 40 CFR 60.44b.~~

~~(3) Rates~~

~~(a) Operating Rates~~

~~The maximum individual MWC throughput shall not exceed 863 tons MSW per day (2589 tons per day entire facility) and 323.6 MMBtu per hour (115% rated capacity) nor produce in excess of 192,000 pounds of steam per hour based on a 4 hour block arithmetic average. (Compliance per new Specific Condition XIV.A.1.a.(3)(b) listed below.) [Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.31b, 60.38b, 60.51b, and 60.58b(j)] [PSD FL 105(B)/PA 85-21 and Rule 62-4.030, F.A.C.]~~

~~(b) Compliance with the Continuous Charging Rate:~~

~~The daily solid waste charging rate and hours of operation shall be determined and recorded for each MWC unit. The daily charging rate shall be determined each month on an average daily basis for each MWC unit using the Facility's truck scale weight data, refuse pit inventory, and MWC operating data for the preceding calendar month. Monthly truck scale weight records on the weight of solid waste received and processed at the facility and refuse~~

pit inventory 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 per MWC unit for each day during the preceding calendar month. [Rule 62-204.800(8)(b), F.A.C. and 40 CFR 60.53(a)]

_____ (c) _____ Unit Load

_____ Unit load means the steam load of the municipal waste combustor (MWC) measured as specified in 40 CFR 60.58b(i)(6). Each MWC unit shall not operate at a load level greater than 110 percent of the unit's maximum demonstrated unit load. The maximum demonstrated unit load is the highest 4 hour arithmetic averaged MWC unit load achieved during four consecutive hours during the most recent dioxin/furan performance stack test in which compliance with the dioxin/furan emission limit was achieved. Higher loads are allowed for testing purposes as specified at 40 CFR 60.53b(b). [Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.31b, 60.38b, 60.51b, 60.53b(b), and 60.58b(i)(8)]

_____ (d) _____ Load Level Requirements

_____ The owner or operator of an affected facility with steam generation capability shall install, calibrate, maintain, and operate a steam flow meter or a feedwater flow meter; measure steam (or feedwater) flow in kilograms per hour (or pounds per hour) on a continuous basis; and record the output of the monitor (in accordance with the ASME method described in 40 CFR 60.58b(i)(6)). Steam (or feedwater) flow shall be calculated in 4 hour block arithmetic averages. Higher loads are allowed for testing purposes as specified at 40 CFR 60.53b(b). [Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.31b, 60.38b, 60.51b, 60.53b(b), and 60.58b(i)(6)]

_____ b. _____ The height of the boiler exhaust stack shall not be less than 195 feet above grade.

_____ c. _____ Capacity

_____ The incinerator boilers shall have a metal nameplate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, rate and certification number.

_____ d. _____ Compliance Tests

_____ (1) _____ Initial compliance tests for each combustion unit shall be conducted within 60 days after achieving maximum boiler operating capacity, but not later than 180 days after startup of the Selective Non-Catalytic Reduction (SNCR) system. Compliance tests shall be performed according to 40 CFR 60.38b. Annual tests shall be conducted within one year after initial compliance tests, unless otherwise allowed by the Department. A test protocol shall be submitted to the Department's Southeast District Office (DEPSED) and the Broward County Department of Planning and Environmental Protection (BCDPEP) at least 45 days prior to initial testing. [40CFR 60.8, 40 CFR 60.11, Rule 62-204.800(8)(b), and Chapter 62-297, F.A.C.]

_____ (2) _____ The following test methods and procedures for 40 CFR 60 and 61 shall be used for compliance testing:

~~_____ (a) Method 1 for selection of sample site and sample traverses.~~

~~_____ (b) Method 2 for determining stack gas flow when converting concentrations to or from mass emission limits.~~

~~_____ (c) Method 3 for analysis for calculation of percent O₂ and CO₂.~~

~~_____ (d) Method 4 for determining stack gas moisture content to convert the flow rate from actual standard cubic feet to dry standard cubic feet for use in converting concentrations in dry gases to or from mass emission limits.~~

~~_____ (e) Method 5, Determination of Particulate Matter Emissions (front half catch only) from Stationary Sources (I) and (A). Pursuant to 40 CFR 60.58b(c)(3), EPA Reference Method 5 shall be used for determining compliance with the particulate matter emission limit. The minimum sample volume shall be 1.7 cubic meters. The probe and filter holder heating systems in the sample train shall be set to provide a gas temperature no greater than 160±14° C. An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 5 run.~~

~~_____ (f) Method 9, Visual Determination of the Opacity of Emissions from Stationary Sources (I) and (A).~~

~~_____ (g) Method 13B or 13A, Determination of Total Fluoride Emissions from Stationary Sources (I) and (A).~~

~~_____ (h) Method 23, Determination of Dioxin/Furan Concentrations from Stationary Sources (I) and (A). Dioxin/Furan emission limit shall be expressed as the total mass of tetra through octa chlorinated dibenzo p dioxins and dibenzofurans. The facility may perform less frequent testing for dioxin/furan emissions as allowed by 40 CFR 60.38b(b) and with prior notice to the Department, if the emission unit's dioxin/furan emissions do not exceed 15 µg/dscm corrected to 7% O₂ or less.~~

~~_____ (i) Method 26 or 26A, Determination of HCl emissions (I) and (A). HCl stack tests upstream and downstream of the control device(s) shall be conducted to calculate percent control to demonstrate compliance with the alternate removal limit.~~

~~_____ (j) Method 29, Determination of Metals Emissions from Stationary Sources (I) and (A). Mercury emissions testing shall be conducted semiannually. Mercury stack tests shall be performed downstream of control devices or upstream and downstream of control devices when determining compliance with the alternative removal equipment.~~

~~_____ (3) Continuous Compliance with Emission Limits:~~

2. Compliance:

a. Continuous compliance with the emission limits listed above for opacity, carbon monoxide (CO), nitrogen oxides (NO_x), and sulfur dioxide (SO₂) and for operational parameters

~~(including but not limited to oxygen measurements, steam production [(lb/hr,) pressure, and temperature] or feedwater flowrate [(lb/hr,) temperature of flue gas at the and fabric filter inlet flue gas temperature, carbon injection system operating parameters, temperature of the combustion zone, slake lime utilization and power generation) shall be demonstrated by continuous emission monitoring systems (CEMS) operated in accordance with 40 CFR 60.58b and 60.59b(f). SO₂ monitors shall be located both upstream of the scrubber and downstream of the baghouse, in order to calculate percent removal efficiency. [Rule 62-204.800(8)(b), F.A.C., and 40 CFR 60.38 (40 CFR 60.58b) and 62-4.070, F.A.C.]~~

b. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.[40 CFR 60.11(a)]

c. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). [40 CFR 60.11(b)]

d. 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 any performance test required under 40 CFR 60.8 in lieu of EPA Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he or she shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), 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 EPA Method 9 data will be used to determine opacity compliance. [40 CFR 60.11(e)(5)]

2. Air Pollution Control Equipment

The permittee shall install, continuously operate, and maintain the following air pollution controls to minimize emissions. Controls listed shall be fully operational upon startup of the proposed equipment.

a. Each boiler is equipped with a particulate emission control device for the control of particulates.

b. Each boiler is equipped with an acid gas control device designed to remove at least 90% of the acid gases. Each MWC unit is required to continuously monitor and record

~~the flue gas temperature at the inlet to the PM control device in accordance with the requirements at 40 CFR 60.58(i)(7). The PM control device temperature shall be calculated in 4-hour block arithmetic averages. Each MWC unit shall be allowed to operate up to 17° C (30° F) above the unit's maximum demonstrated PM control device temperature. The maximum demonstrated PM control device temperature is the highest 4-hour arithmetic block-averaged measurement of temperature at the inlet to the PM control device recorded for 4 consecutive hours during the most recent dioxin/furan performance test which complied with the limits given above. The PM control device inlet temperature and the steam (or feedwater) flow for each unit during the stack test shall be continuously monitored and recorded in accordance with 40 CFR 60, Subpart Cb. Higher temperatures are allowed for testing purposes, as specified at 40 CFR 60.53b(e). [Rule 62-204.800(8)(b), F.A.C., and 40 CFR 60.38b, 40 CFR 60.53b(e) and 60.58(i)(7)]~~

~~_____ c. _____ Each boiler shall be equipped with a selective non-catalytic reduction system to control nitrogen oxide emissions.~~

~~_____ d. _____ Mercury is controlled by source separation techniques pursuant to Rule 62-296.416, F.A.C.~~

~~_____ e. _____ The Permittee must submit to the Department within thirty (30) days after it becomes available, copies of technical data pertaining to the selected emissions control systems. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters. The data shall be processed and approved or denied in accordance with F.S. 120.60.~~

~~_____ 3. _____ Continuous Emission Monitoring Program~~

~~_____ The Permittee shall install, continuously operate, and maintain the following continuous monitoring systems for each boiler exhaust stack:~~

~~_____ a. _____ Continuous monitors for SO₂ shall be installed after the acid gas control device for each unit. The systems shall meet the EPA monitoring performance specifications of 40 CFR 60.13 and 40 CFR 60, Appendix B, during initial compliance testing and annually thereafter. Additionally, CEMs shall meet the quality control requirements of 40 CFR 60, Appendix F.~~

~~_____ b. _____ CEM data recorded during periods of startup, shutdown, and malfunction shall be reported but excluded from compliance averaging periods for CO, NO_x and opacity.~~

~~_____ c. _____ CEM data recorded during periods of startup and shutdown shall be excluded from compliance averaging periods for SO₂. CEM data recorded during periods of acid gas control device malfunctions shall be excluded from compliance averaging periods for SO₂ provided that the preceding thirty-day period, which ends on the last day of the malfunction period, meets an average SO₂ emission limit equal to the SO₂ limit specified in condition XIV.A.1.a. CEM data must be available for 90% of the operating time for this exemption to apply. A malfunction as used in this certification means any sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.~~

~~_____ d. _____ An excess emissions report shall be submitted to EPA for every calendar quarter. The report shall include the following:~~

~~_____ (1) _____ The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date, and time of commencement and completion of each period of excess emissions (60.7(e)(1)).~~

~~_____ (2) _____ Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted shall also be reported (60.7(e)(2)).~~

~~_____ (3) _____ The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments (60.7(e)(3)).~~

~~_____ (4) _____ When no excess emissions have occurred or the continuous emission monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report (60.7(e)(4)).~~

~~_____ (5) _____ The permittee shall maintain a file of all measurements, including continuous emission monitoring systems performance evaluations; all continuous monitoring systems of monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by these Conditions of Certification recorded in a permanent form suitable for inspection (60,7(d)).~~

~~_____ (6) _____ Excess emissions shall be defined as any applicable period during which the average emissions of CO, NOx and/or SO₂, as measured by the CEM, exceed the CO, NOx and/or SO₂ maximum emission limits (in ppm) set for each pollutant in Condition XIV.A.1.a. above.~~

~~_____ e. _____ Excess emissions indicated by the CEM systems shall be considered violations of the applicable opacity limit or operating emission limits (in ppm) for the purposes of this certification provided the data represents accurate emission levels and the CEMs do not exceed the calibration drift (as specified in the respective performance specification tests) on the day when initial and subsequent compliance is determined. The burden of proof to demonstrate that the data does not reflect accurate emission readings shall be the responsibility of the permittee.~~

~~_____ f. _____ 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 start-up or shutdown shall be prohibited.~~

~~_____ g. _____ The Permittee shall provide sampling ports in the air pollution control equipment outlet duct or stack and shall provide access to the sampling ports in accordance with Section 62-297, F.A.C. Drawings of testing facilities including sampling port locations as required by Section 62-297 shall be submitted to the Department for approval at least ninety (90) days prior to construction of the sampling ports and stack.~~

~~h. The Permittee shall have a sampling test of the emissions performed by a commercial testing firm within sixty (60) days after achieving the maximum rate at which the boilers will be operated but not later than 180 days after the start of operation of the boilers and annually from the date of testing thereafter. Thirty (30) days prior notice of the initial testing shall be provided to the Southeast District Office and to the Broward County Department of Planning and Environmental Protection (BCDPEP). Fifteen (15) days' prior notice shall subsequently be provided for annual sampling tests.~~

~~4. Reporting~~

~~a. A copy of the results of the compliance tests shall be submitted within forty five days of testing to the DEP Bureau of Air Regulation, New Source Review Section, MS 5505, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, to the DEP Southeast District Office, 400 North Congress Avenue, West Palm Beach, Florida 33416-5425, and to the Broward County Department of Planning and Environmental Protection, Air Quality Division, 218 Southwest First Avenue, Ft. Lauderdale, Florida, 33301.~~

~~b. Continuous emission monitoring data shall be reported to the DEP Southeast District, Broward County offices, and EPA Region IV on a quarterly basis in accordance with Rule 62-204.800(8)(b), F.A.C., and 40 CFR 60.7. The EPA address for submitting reports is:~~

~~Chief, Air Radiation Technology Branch
U.S. EPA Region IV
61 Forsyth Street
Atlanta, Georgia 30303~~

~~d. Excess emissions monitoring for opacity, CO, NO_x, and SO₂ shall be reported to the Southeast District Office and BCDPEP on a quarterly basis in accordance with Section 62-297, F.A.C., and 40 CFR, Part 60, Subsection 60.7.~~

~~e. Notice of anticipated and actual start-up dates of each incinerator boiler shall be submitted to the DEP Southeast District Office and to the BCDPEP.~~

~~5. Unconfined Emissions~~

~~Proper dust control techniques such as water sprays or chemical wetting agents or other containment method shall be used to control visible unconfined (fugitive) emissions to the outside air to no more than 10% opacity as determined by DEP Method 9 for unconfined resource recovery facility processes. Proper techniques shall also be used to control such emissions to prevent them from crossing the property line(s) from any other unconfined sources and to limit them to no more than three (3) minutes (cumulative) in any fifteen (15) minute period as determined by 40 CFR, Part 60, Appendix A, Method 22, with observations being made along the property line. Visible emissions shall not include uncombined water vapor or emissions from engine exhausts.~~

~~B. Fuel~~

~~_____ The primary fuel for this facility is municipal solid waste (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 (1998).~~

~~_____ 1. Subject to the limitations contained in these Conditions of Certification, the authorized fuels for the facility also include the other solid wastes that are not MSW which are described below. However, the facility shall not burn:~~

- ~~_____ a. those materials that are prohibited by state or federal law;~~
- ~~_____ b. those materials that are prohibited by these Conditions of Certification;~~
- ~~_____ c. those materials that are not authorized by these Conditions of Certification;~~
- ~~_____ d. lead acid batteries;~~
- ~~_____ e. hazardous waste;~~
- ~~_____ f. nuclear waste;~~
- ~~_____ g. radioactive waste;~~
- ~~_____ h. sewage sludge;~~
- ~~_____ i. explosives; and~~
- ~~_____ j. asbestos-containing materials.~~

~~_____ 2. 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:~~

- ~~_____ a. well mixed with MSW in the refuse pit, or~~
- ~~_____ b. alternately charged with MSW in the hopper.~~

~~_____ 3. the facility owner/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, below (7 and 80. For the purposes of these Conditions of Certification, a segregated load is defined to mean a container or truck that is almost completely or exclusively filled with a single item or homogenous composition of waste material, as determined by visual inspection.~~

~~_____ 4. 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 emission monitors (CEMS) for
oxygen, carbon monoxide, sulfur dioxide, oxides of nitrogen, and particulate control device inlet
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 these Conditions of Certification.~~

~~_____ 5. _____ 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.~~

~~_____ 6. _____ Subject to the conditions and limitations contained in these Conditions of
Certification, the following other solid waste may be used as fuel at the facility:~~

~~_____ a. _____ Confidential, proprietary or special documents (including but not limited
to business records, lottery tickets, coupons, credit cards, magnetic tape and microfilm);~~

~~_____ b. _____ 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;~~

~~_____ c. _____ Wood pallets, clean wood, and land clearing debris;~~

~~_____ d. _____ Packaging materials and containers;~~

~~_____ e. _____ Clothing, natural and synthetic fibers, fabric remnants, and similar
debris, including but not limited to aprons, and gloves; and~~

~~_____ f. _____ Rugs, carpets, and floor coverings, but not asbestos containing materials
or polyethylene or polyurethane vinyl floor coverings.~~

~~_____ 7. _____ Subject to the conditions and limitations contained in these Conditions of
Certification, 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 by using a rolling 30 day average in accordance with
Condition XIV.B.9. below.~~

~~_____ 8. _____ Subject to the conditions and limitations contained in these Conditions of
Certification, 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 by using a rolling 30 day average in accordance with Condition No. XIV.B.9. below:

- ~~_____ a. _____ Construction and demolition debris.~~
- ~~_____ b. _____ Oil spill debris from aquatic, coastal, estuarine or river environments. Such items or materials include but are not limited to rags, wipes, and absorbents.~~
- ~~_____ c. _____ 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.~~
- ~~_____ d. _____ 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.~~
- ~~_____ e. _____ Waste materials that:
 - ~~_____ i. _____ are generated in the manufacture of items in categories (c) or (d), above and are functionally or commercially useless (expired, rejected or spent); or~~
 - ~~_____ ii. _____ 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.~~~~
- ~~_____ f. _____ Waste materials that contain oil from:
 - ~~_____ i. _____ routine cleanup of industrial or commercial establishments and machinery; or~~
 - ~~_____ ii. _____ spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.~~~~
- ~~_____ g. _____ Used oil and used oil filters. Used oil containing a PCB concentration equal or greater than 50 ppm shall not be burned, pursuant to the limitations of 40 CFR 761.20(e).~~
- ~~_____ h. _____ 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 prior approval of the Department.~~
- ~~_____ 9. _____ Segregated Solid Waste Record Keeping:
 - ~~_____ The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of Condition XIV.B.:~~
 - ~~_____ a. _____ Each segregated load of non-MSW materials that is subject to the percentage weight limitations of conditions XIV.B.7. and XIV.B.8. which is received for processing shall~~~~

be documented as to waste description and weight. The weight of all waste materials received for processing shall be measured using the facility truck scale and recorded.

~~_____ b. _____ 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 29 days. The resultant 30 day total weight of tires shall be divided by the total weight of all waste materials received in the same 30 day period and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation.~~

~~_____ c. _____ 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 29 days. The resultant 30 day total weight of segregated non-MSW materials shall be divided by the total weight of all waste materials received in the same 30-day period 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.~~

~~_____ C. _____ Metal Recovery Facility~~

~~_____ A metal recovery area may be constructed and shall be enclosed in a building adjacent to the existing ash loadout area. All bottom ash is currently quenched with water after leaving each boiler. All bottom ash shall continue to be quenched after leaving each boiler so that the resulting bottom ash will contain approximately 20 to 30 percent moisture and will not generate fugitive dust. Ash being processed at this facility shall continue to meet the requirements of XIV.A.1.a.(1)(d), Ash Handling Facilities.~~

~~_____ D. _____ Electric Utility Steam Generating Unit Actual Emissions~~

~~_____ The permittee shall provide the Department within the period not longer than 10 years following the change, information demonstrating that the physical or operational change did not result in a representative actual annual emissions increase in accordance with Rule 62-210.200(12)(d), F.A.C., and Rule 62-212.400, F.A.C. [40 CFR 52.21(b)(33), Rule 62-4.070(3), Rule 62-212.400, and Rule 62-210.200, F.A.C.]~~

~~_____ E. _____ Determination of Process Variables~~

~~_____ Any other operating parameters (including but not limited to control equipment operating parameters) established during compliance testing and/or inspection that will confirm the proper operation of each emission unit shall be included in the operating permit. [Rule 62-297.310(5), F.A.C., and 62-4.070(3), F.A.C.]~~

XV G. WATER

F.A. Wastewater Disposal

G. B. Water Discharges

L.C. Potable Water System

XVI H. SOLID/HAZARDOUS WASTE

- 1.A.
- 2.B.
- 3.C.
- 4.D.
- 5.E.
- 6.F.
- 7.G.
- 8.H.
- 9.I.
- 10.J.
- 11.K.
- 12.L.
- 13.M.
- 14.N.
- 15.O.
- 16.P.

I. Operational Safeguards

~~————— The overall design and layout of the facilities shall be such as to mitigate potential adverse effects to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction and operation. The safety standards specified under Section 440.56, Florida Statutes, by the Industrial Safety Section of the Florida Department of Commerce will be complied with during operation.~~

J. Transmission Lines

~~————— The directly associated transmission lines from the Resource Recovery Facility electric generators to the Florida Power and Light Company substation shall be kept cleared without the use of herbicides.~~

K. Noise

~~————— Operational noises shall not exceed local noise ordinance limitations nor those noise standards imposed by zoning.~~

L. Potable Water System

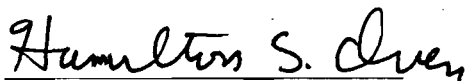
~~————— The potable water system (wells, pipes, pumps and treatment facilities) shall be designed, constructed and operated in conformance with the applicable provisions of Chapters 62-521, 62-532 and 62-550, F.A.C. Plans and specifications for these facilities shall be provided to the Southeast~~

Wheelbrator South Broward
Order Modifying Conditions of Certification
DEP Case Number PA 85-91F
05/20/05

~~District Office and the Broward County Department of Planning and Environmental Protection for review and approval ninety (90) days prior to construction.~~

Any party to the this Order has a right to seek judicial review of it pursuant to Section 120.68, Florida Statutes by filing a Notice of Appeal, pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, Tallahassee, Florida 32399-3000, and by filing a copy of the Notice of Appeal, accompanied by the applicable filing fees, with the appropriate District Court of Appeal. The Notice of Appeal must be filed within thirty days from the date this Order is filed with the Clerk of the Department of Environmental Protection.

Executed in Tallahassee, Florida.



Hamilton S. Oven, P.E.
Administrator, Siting Coordination Office

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52
Florida Statutes, with the designated
Department Clerk, receipt of which is
hereby acknowledged.

 5/20/05
Clerk Date

Wheelbrator South Broward
Order Modifying Conditions of Certification
DEP Case Number PA 85-91F
05/20/05

CC by certified mail:

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Fish and Wildlife Conservation Commission
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Tallahassee, FL 32399-1600

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