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**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION**

In Re: Hillsborough County Solid)
Waste Energy Recovery Facility)
Modification of Conditions of)
Certification PA 83-19)
Hillsborough County, Florida)

DEP FILE NO. PA83-19A
OGC CASE NO. 98-1641

**FINAL ORDER
MODIFYING CONDITIONS OF CERTIFICATION**

On December 20, 1984, the Governor and Cabinet, sitting as the Siting Board, issued a final order approving certification for the Hillsborough County Solid Waste Energy Recovery Facility (facility). That certification order approved the construction and operation of a 29 MW waste-fired turbine generation unit and associated facilities located in Hillsborough County, Florida.

On September 15, 1997, Hillsborough County filed a request with the Florida Department of Environmental Protection (Department) to modify PSD Permit PSD-FL-121(B). On September 15, 1997, Hillsborough County also filed a request to modify the conditions of certification pursuant to Section 403.516(1), Florida Statutes, and Condition XIV, which delegates authority to modify conditions to the Department. Hillsborough County requested that the PSD permit and the conditions be modified to replace the air pollution control system on a nominal 1200 (1380 peak) ton per day waste combustion and energy recovery facility in order to comply with the requirements of 40 CFR 60, Subpart Cb - Emission Guideline and Compliance Times for Municipal Waste Combustors That Are Constructed on or Before December 19, 1995. Electrostatic precipitators will be replaced with selective non-catalytic reduction systems, spray dryer absorbers, activated carbon injection units, and fabric filters. The modifications also expand

peak waste input to 115 percent of nominal capacity and define wastes which can be combusted.

The Department is also implementing a modification of the conditions of certification to conform to the requirements of federally delegated or required permits such as, but not limited to, PSD permits, Title V permits or NPDES permits.

Copies of Hillsborough County's and the Department's proposed modifications were made available for public review in September, 1997. On September 8, 1997, all parties to the original proceeding were mailed copies of the intent to modify. On October 10, 1997, a Proposed Modification of Power Plant Certification was published in the Florida Administrative Weekly. The notice specified that a hearing would be held if a party to the original certification hearing objected within 45 days from receipt of the proposed notice of modification or if a person whose substantial interests will be affected by the proposed modification objected in writing within 30 days after issuance of the public notice. No written objections to the proposed modifications were received by the Department. Accordingly, in the absence of any timely objection,

IT IS ORDERED:

The proposed changes to the Hillsborough County Solid Waste Energy Recovery Facility Conditions of Certification as described in the September 15, 1997, request for modification and in the Department's October 10, 1997, Notice of Intent to Issue Proposed Modifications to Power Plant Certification are APPROVED. Pursuant to Section 403.516(1)(b), Florida Statutes, the conditions of certification for the Hillsborough County Solid Waste Energy Recovery Facility are **MODIFIED** as follows:

II. OPERATION

A. AIR

The operation of the Resource Recovery Facility shall be in accordance with all applicable provisions of Chapter 17-2, 17-4, and 17-7, Florida Administrative Code. In addition to the foregoing, the permittee shall comply with the following specific conditions of certification:

1. ~~Emission Limitations~~

a. ~~Stack emissions from each unit shall not exceed the following:~~

1. ~~Particulate matter: 0.021 grains per standard cubic foot dry gas corrected to 12% CO₂ with maximum cap of 7.0 pounds per hour per unit~~
2. ~~SO₂: 3.2 lbs/ton of solid waste fired, maximum 24 hour average~~
3. ~~Nitrogen Oxides: 6.4 lbs/ton or 404 ppm~~
4. ~~Carbon Monoxide: 1.8 lbs/ton at 12% CO₂~~
5. ~~VOC: 0.2 lbs/ton~~
6. ~~Mercury: 2200 grams/day~~
7. ~~Odor: there shall be no objectionable odor~~
8. ~~Visible emissions: opacity from each boiler shall not be greater than 15% except that visible emissions with no more than 20% opacity may be allowed for up to three minutes in any one hour except during start up or upsets when the provision of 17-2.250, F.A.C., shall apply. Opacity from the ash handling facility baghouse shall not exceed 5%. Opacity compliance shall be demonstrated in accordance with Florida Administrative Code Rule 17-2.700(6) (a), DER method 9. The compliance test requirements for the ash handling facility shall be waived in accordance with Rule 17-2.700(3)(d), F.A.C.~~
9. ~~Beryllium: 13.1 x 10⁻⁶ lb/tons~~

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

~~b. The incinerator boilers shall not be loaded in excess of their rated capacity of 36,666 pounds per hour each.~~

~~c. The incinerator boilers shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, rated capacity and certification number. Compliance with the limitations for particulates, sulfur oxides, nitrogen oxides, carbon monoxide and lead shall be determined in accordance with Florida Administrative Code Rule 17-2.700, DER Methods 1, 2, 3, 5, 6, and 40 CFR 60, Appendix A, Method 7. Compliance with the opacity of stack emissions shall be demonstrated in accordance with Florida Administrative Code Rule 17-2.700(6)(a)9., DER Method 9. The stack test shall be performed at +10% of the heat input rate of 150 million Btu per hour; however, compliance with the particulate matter emission limit shall be at design capacity.~~

~~e. The permittee must submit to the Department within thirty (30) days after it becomes available, copies of technical data pertaining to the incinerator boiler design, to the electrostatic precipitator design, and to the fuel mix that can be used to evaluate compliance of the facility with the preceding emission limitations.~~

~~f. Grease, scum, grit screenings or sewage sludge will not be charged into the solid waste to energy facility boilers.~~

~~2. Electrostatic Precipitator~~

~~The electrostatic precipitator shall be designed and constructed to achieve a maximum emission rate of 0.021 grains per dscf.~~

~~3. Air Monitoring Program~~

~~a. The permittee shall install and operate continuously monitoring devices for stack oxygen and opacity. The monitoring devices shall meet the applicable requirements of Chapter 17-2.710, FAC, and 40 CFR 60.45, and 40 CFR 60.13, including certification of each device.~~

~~b. The permittee shall provide sampling ports into the stack and shall provide access to the sampling ports in accordance with Section 17-2.700(4), FAC.~~

~~c. The permittee shall have a sampling test of the stack emissions performed by a commercial testing firm within 90 days of the start of operation of the boilers and annually from the date of testing thereafter.~~

~~4. Reporting~~

~~a. Two copies of the results of the stack tests shall be submitted within forty-five days of testing to the DER Southwest Florida District Office.~~

~~b. Stack monitoring shall be reported to the DER Southwest District Office on a quarterly basis in accordance with Section 17-2.710, FAC, and 40 CFR, Part 60, Subsection 60.7.~~

~~B. Fuel~~

~~The Resource Recovery Facility shall utilize refuse such as garbage and trash (as defined in Chapter 17-7, FAC) but not sludge from sewage treatment plants as its fuel. Use of alternate fuels would necessitate modification of these Conditions of Certification.~~

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. 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. 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.

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

a. 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

a. 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. EMISSIONS LIMITS, 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:

<u>EMISSIONS</u>	
<u>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.

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.

8. EMISSIONS LIMITS, SPECIFIC CONDITIONS

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

<u>EMISSIONS</u>	
<u>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>

{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. }

9. OPERATIONAL REQUIREMENTS

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.

b. Process Operating Rates

(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 II.A.10.f and II.A.10.g)

(2) Combustion efficiency shall be calculated by: %CE= [1/1+(CO/CO₂)] X 100, and shall be at least 99.5% for an 8-hour average.

c. 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).

d. Emission Control Equipment

(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.

(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 ppm_{dv} corrected to 7 percent O₂, 24-hour block geometric mean, whichever is less stringent.

(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).

(4) Selective Non Catalytic Reduction System: The facility shall be equipped with SNCRs which are designed, constructed and operated to not exceed a

maximum NOx emission rate of 205 ppm_{dv} corrected to 7 percent O₂, 24-hour block arithmetic mean (midnight to midnight).

(5) Within 30 days after it becomes available, but before commencement of construction, the permittee 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.

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 do 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.

h. The following maximum emissions limits shall not be exceeded:

<u>POLLUTANT</u>	<u>EMISSION STANDARDS</u>	<u>LB/MMB tu</u>	<u>LB/HR</u>	<u>TON/YR</u>
<u>PM⁽¹⁾</u> <u>Particulate Matter</u>	<u>27 mg/dscm or 0.012 gr/dscf corrected to 7% O₂</u>	<u>0.024</u>	<u>4.1</u>	<u>17.96</u>
<u>VE</u> <u>Visible Emissions</u>	<u>10% (6 min. block avg.)</u>			

<u>Cd</u> Cadmium	<u>0.040 mg/dscm</u> <u>corrected to 7% O₂</u>	<u>3.47E-05</u>	<u>6.00E-03</u>	<u>0.026</u>
<u>F</u> Fluorides	<u>6.74 mg/dscm</u> <u>corrected to 7% O₂</u>	<u>0.0059</u>	<u>1.00</u>	<u>4.43</u>
<u>Be⁽³⁾</u> Beryllium	<u>1.48 ug/dscm</u> <u>corrected to 7% O₂</u>	<u>1.27E-06</u>	<u>2.18E-04</u>	<u>9.6E-04</u>
<u>Pb</u> Lead	<u>0.44 mg/dscm</u> <u>corrected to 7% O₂</u>	<u>3.81E-04</u>	<u>0.065</u>	<u>0.288</u>
<u>Hg⁽⁵⁾</u> Mercury	<u>70 ug/dscm or 85%</u> <u>reduction by weight</u> <u>corrected to 7% O₂</u> <u>(whichever is less</u> <u>stringent)</u>	<u>1.17E-04</u> <u>or 85%</u> <u>reduction</u> <u>@ 7% O₂</u>	<u>0.020 or</u> <u>85%</u> <u>reduction</u> <u>@ 7% O₂</u>	<u>0.087</u>
<u>SAM</u> Sulfuric Acid Mist	<u>To be initially shown not</u> <u>to exceed 0.072 gr/dscf</u> <u>corrected to 12% CO₂</u>			
<u>SO₂⁽⁵⁾</u> Sulfur Dioxide	<u>29 ppmdv or 75%</u> <u>reduction</u> <u>by weight or volume</u> <u>corrected to 7% O₂</u> <u>(whichever is less</u> <u>stringent)</u>	<u>0.190 or</u> <u>75%</u> <u>reduction</u> <u>@ 7% O₂</u>	<u>32.86 or</u> <u>75%</u> <u>reduction</u> <u>@ 7% O₂</u>	<u>143.9</u>
<u>HCl⁽⁵⁾</u>	<u>29 ppmdv or 95%</u>	<u>0.099 or</u>	<u>17.00 or</u>	<u>74.43</u>

<u>Hydrochloric Acid</u>	<u>reduction</u> <u>corrected to 7% O₂</u> <u>(whichever is less</u> <u>stringent)</u>	<u>95%</u> <u>reduction</u> <u>@ 7% O₂</u>	<u>95%</u> <u>reduction</u> <u>@ 7% O₂</u>	
<u>Dioxins/Furans</u>	<u>30 ng/dscm</u> <u>corrected to 7% O₂</u>	<u>2.60 E-08</u>	<u>4.5E-06</u>	<u>1.96E-05</u>
<u>CO</u> <u>Carbon Monoxide</u>	<u>100 ppm_{dv}</u> <u>corrected to 7% O₂</u>	<u>0.101</u>	<u>17.4</u>	<u>76.26</u>
<u>NO_x</u> ⁽²⁾ <u>Nitrogen Oxides</u>	<u>205 ppm_{dv}</u> <u>corrected to 7% O₂</u>	<u>0.34</u>	<u>58.63</u>	<u>256</u>
<u>VOC</u> ⁽⁴⁾ <u>Volatile Organic</u> <u>Compounds</u>	<u>To be demonstrated</u> <u>initially.</u> <u>Not to exceed 0.01</u> <u>gr/dscf at 12%CO₂</u>			

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 NO_x standard of 40 CFR 60.44b does not apply to these emissions units because this permit 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:

ug/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 II.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⁽¹⁾ 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⁽³⁾ or 26A Determination of HCl emissions (I) and (A).

Method 29⁽³⁾ Determination of Metals Emissions from Stationary Sources (I) and (A).

NOTES: ¹ 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.

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 ug/dscm corrected to 7% O₂ 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(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.

(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 ug/dscm corrected to 7% O₂ 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 SO₂ 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

(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 B.8 and the operational parameters (steam

production, etc.) listed in Specific Condition No. B.3 shall be demonstrated by CEMS operated in accordance with 40 CFR 60.58b and 60.59b(f).

(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).

(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.

(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).

(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:

(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(c). 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(c)(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:

<u>EMISSIONS</u>	
<u>UNIT No.</u>	<u>EMISSIONS UNITS DESCRIPTION</u>
<u>xxx</u>	<u>Ash Building and Handling System</u>
<u>xxx</u>	<u>Lime Silo</u>
<u>xxx</u>	<u>Carbon Silo</u>

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:

<u>EMISSIONS</u>	
<u>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>
<u>xxx</u>	<u>Lime Silo</u>
<u>xxx</u>	<u>Carbon Silo</u>

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 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.

XIV MODIFICATION OF CONDITIONS

A. Pursuant to Subsection 403.516(1), F.S. Florida Statutes, the Board hereby delegates the authority to the Secretary to modify any condition of this certification dealing with sampling, monitoring, reporting, specification of control equipment, related time schedules, SO₂ emission limitations (subject to notice and opportunity for hearing), or any special studies conducted, as necessary to attain the objectives of Chapter 403, Florida Statutes. Requests for modifications of monitoring requirements shall not be unreasonably withheld by the Department.

B. This certification shall be automatically modified to conform to any subsequent amendments, modifications, or renewals made by the Department under a federally delegated or approved program to any separately issued Prevention of Significant Deterioration (PSD) permit, Title V air permit, or National Pollutant Discharge Elimination System (NPDES) permit for the certified facility. The Permittee shall send each party to the original certification proceedings (at the party's last known address as shown in the record of such proceeding) notice of requests for modifications or renewals of the above listed permits if the request involves a relief mechanism (e.g., mixing zone, variance, etc.) from standards, a relaxation of conditions included in the permit

due to state permitting requirements, or the inclusion of less restrictive air emission limitations in the air permits. The Department shall notify all parties to the certification proceeding of any intent to modify conditions under this section prior to taking final agency action.

C. All other modifications to these conditions shall be made in accordance with section 403.516, Florida Statutes.

NOTICE OF RIGHTS

Any party to this Notice has the right to seek judicial review of the Order Pursuant to Section 120.68, Florida Statutes, by the filing of 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 30 days from the date that the Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this 15th day of June, 1998 in Tallahassee,
Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Virginia B. Wetherell

VIRGINIA B. WETHERELL
SECRETARY
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000
Telephone: (850) 488-1554

**FILING AND ACKNOWLEDGEMENT
FILED, ON THIS DATE, PURSUANT TO §120.68
FLORIDA STATUTES, WITH THE DESIGNATED
DEPARTMENT CLERK, RECEIPT OF WHICH
IS HEREBY ACKNOWLEDGED.**

Yolanda Waters 6/15/98
DEPUTY CLERK DATE

CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing Final Order Modifying Conditions of

Certification was sent by U.S. Mail, hand delivery or interagency mail to:

Andrew S. Grayson, Esquire
Department of Community Affairs
2555 Shumard Oak Boulevard
Tallahassee, Florida 32399-2100

Earl Peterson, Director
Division of Forestry
Department of Agriculture and
Consumer Services
3125 Conner Boulevard, C-19
Tallahassee, Florida 32399-1650

Mary S. Miller, Esquire
Department of Transportation
Haydon Burns Building
605 Suwannee Street
Tallahassee, Florida 32399

George W. Perry, Director
Division of Historical Resources
Archives and History
R.A. Gray Building
500 South Bronough Street
Tallahassee, Florida 32399

Roger Tucker, Esquire
TBRPC, Suite 219
9455 Koger Boulevard
St. Petersburg, Florida 33702

Robert V. Elias, Esquire
Division of Legal Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

James V. Antista, Esquire
Florida Game and Fresh Water
Fish Commission
Bryant Building
620 South Meridian Street
Tallahassee, Florida 32399-1600

Pepe Menendez, P.E.
Department of Health
Environmental Health Services
1317 Winewood Boulevard
Tallahassee, Florida 32399-0070

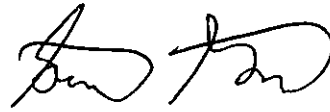
Thomas Smith
Executive Manager
Department of Solid Waste
601 East Kennedy Boulevard
Tampa, Florida 33601

Rick Tschantz, Esquire
Southwest Florida WMD
2379 Broad Street
Brooksville, Florida 34609-6899

Martha Chumbler, Esq.
Carlton, Fields, Ward, Emmanuel,
Smith & Cutter, P.A.
Post Office Box 190
Tallahassee, Florida 32302

on this 16th day of June, 1998.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



SCOTT A. GOORLAND
Assistant General Counsel
Florida Bar No. 0066834

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Telephone: (850) 488-9730