



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

January 27, 1998

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Daniel A. Kleman
County Administrator
Hillsborough County
601 East Kennedy
Tampa, Florida 33602

Re: Resource Recovery Facility Air Pollution Control Project
Draft Permit No. PSD-FL-121(B)

Dear Mr. Kleman:

Enclosed is one copy of the Draft Modification to the Permit for the Prevention of Significant Deterioration of Air Quality (PSD Permit) for the Hillsborough County Resource Recovery facility located at 350 Falkenburg Road, Tampa, Hillsborough County, Florida 33619. The Department's Intent to Issue Permit Modification, the DRAFT Permit Modification, Technical Evaluation and Preliminary Determination, and the "PUBLIC NOTICE OF INTENT TO ISSUE PERMIT MODIFICATION" are also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE PERMIT MODIFICATION" must be published within 30 (thirty) days of receipt of this letter. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A. A. Linero, P.E., Administrator, New Source Review Section at the above letterhead address. If you have any other questions, please contact Ms. Teresa Heron or Mr. Linero at 850/488-1344.

Sincerely,

C. H. Fancy, P.E., Chief,
Bureau of Air Regulation

CHF/th
Enclosures

In the Matter of an
Application for Permit by:

Hillsborough County
601 East Kennedy
Tampa, Florida 33602

DRAFT Permit No. PSD-FL-121(B)
Resource Recovery Facility
Hillsborough County

INTENT TO ISSUE AIR CONSTRUCTION PERMIT MODIFICATION

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit modification (copy of DRAFT Permit modification attached) for the proposed project, detailed in the application specified above, for the reasons stated below.

The applicant, Hillsborough County, applied on September 16, 1997 to the Department for a modification of the Prevention of Significant Deterioration Permit (PSD Permit) originally issued in 1986 by the United States Environmental Protection Agency. The modification is to: replace and improve the air pollution control system 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; specify which materials can be burned; and define process throughput parameters at the County's nominal 1200 ton per day Resource Recovery Facility located at 350 Falkenburg Road, Tampa, Florida 33619.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that a PSD permit modification is required for the proposed work and other changes requested by the applicant.

The Department intends to issue this permit modification based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed "Public Notice of Intent to Issue PERMIT MODIFICATION". The notice shall be published one time only within 30 (thirty) days in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 904/488-1344; Fax 904/ 922-6979) within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit pursuant to Rule 62-103.150 (6), F.A.C.

The Department will issue the FINAL Permit Modification, in accordance with the conditions of the enclosed DRAFT Permit Modification unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed DRAFT Permit issuance action for a period of 14 (fourteen) days from the date of publication of "PUBLIC NOTICE OF INTENT TO ISSUE PERMIT MODIFICATION." Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit Modification, the Department shall issue a Revised DRAFT Permit Modification and require, if applicable, another Public Notice.

Is your RETURN ADDRESS completed on the reverse?

- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

- 1. Addressee's Address
- 2. Restricted Delivery
Consult postmaster for fee.

3. Article Addressed to:
 Mr. Daniel A. Klemm, CA
 Hillsborough County
 601 E. Kennedy
 Tampa, FL 33602

4a. Article Number
 P265 659 286

4b. Service Type
 Registered Certified
 Express Mail Insured
 Return Receipt for Merchandise COD

7. Date of Delivery
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5. Received By: (Print Name)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Addressee or Agent)
 X *[Signature]*

PS Form 3811, December 1994 Domestic Return Receipt

Thank you for using Return Receipt Service

P 265 659 286

US Postal Service
Receipt for Certified Mail
 No Insurance Coverage Provided.
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Street & Number	Norland Co.
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Postage	Tampa, FL
Certified Fee	
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Return Receipt Showing to Whom & Date Delivered	
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DSD-FI-121(B)	

PS Form 3800, April 1995

The Department will issue the permit modification with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S. Mediation is not available for this action.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 904/488-9730, fax: 904/487-4938. Petitions must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the action or proposed action addressed in this notice of intent.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.


for C. H. Fancy, P.E., Chief
Bureau of Air Regulation

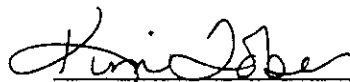
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE PERMIT MODIFICATION (including the PUBLIC NOTICE, and the DRAFT permit modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 1-28-98 to the person(s) listed:

- Daniel Kleman, County Administrator *
- Ronnie Mason, City Council Chairman, Tampa
- Brian Beals, EPA
- John Bunyak, NPS
- Douglas W. Fredericks, P.E.
- Jerry Campbell, HCEPC
- Bill Thomas, SWD
- Martha Chumbler, Carlton Fields
- Don Elias, RTP

Clerk Stamp

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


(Clerk)

1-28-98
(Date)

PUBLIC NOTICE OF INTENT TO ISSUE PERMIT MODIFICATION

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DRAFT Permit No. PSD-FL-121 (B)
Hillsborough County Resource Recovery Facility
Hillsborough County

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit modification to Hillsborough County to: replace and improve the air pollution control system; define process throughput parameters; increase amount of waste that can be burned on a short-term basis, and specify which materials can be burned at its resource recovery facility located at 350 Falkenburg Road, Tampa, Hillsborough County, Florida. It was determined that an additional review for the Prevention of Significant Deterioration (PSD) is not applicable and a Best Available Control Technology determination was not required pursuant to Rule 62-212.400 and 410., F.A.C. The applicant's name and address are: Hillsborough County, 601 East Kennedy, Tampa, Florida 33602.

The purpose of the project is to comply with 40 CFR 60, Subpart Cb - Emission Guideline and Compliance Times for Municipal Waste Combustors That Are Constructed on or Before December 19, 1995. The Emission Guideline was developed pursuant to Section 129 (Solid Waste Combustion) of the Clean Air Act as amended in 1990. These requirements are incorporated in Department Rule 62-204.800(8), F.A.C.

The facility consists of three nominal 400 ton per day (TPD) mass burn furnaces, waterwall boilers, ash discharge systems, air pollution control equipment, and a single three-stage steam turbine with a 29 megawatt electrical generator. The proposed improvements to the air pollution control system consist of replacing the existing electrostatic precipitators with lime spray dryer absorbers and fabric filters. This will add acid gas control for sulfur dioxide and hydrogen chloride, improve particulate (PM/PM₁₀) collection efficiency, and enhance collection of heavy metals, including lead and cadmium. An activated carbon injection system will be installed for additional mercury control. Nitrogen oxides will be controlled by selective non-catalytic reduction. Combustion controls will be incorporated to minimize formation of dioxins and furans, volatile organic compounds, and carbon monoxide.

The original PSD permit contained annual testing requirements only for particulate matter. Specific limits and testing requirements are proposed for all previously mentioned pollutants. Continuous emission monitors will be installed for sulfur dioxide, nitrogen oxides, oxygen, carbon monoxide, and temperature at key points.

The units were originally permitted to utilize "refuse such as garbage and trash" as defined in the Department's solid waste rules. The modified permit will specify the wastes as: solid waste including municipal solid waste (MSW) as defined at 40 CFR 60.51b and Section 403.706(5), F.S.; segregated wastes such as records and documents, non-hazardous contraband, clean wood and land clearing debris, packaging materials, clothing and fabric remnants and certain types of floor covering; segregated waste tires (not to exceed 3 percent of the total wastes received); other segregated wastes (not to exceed 5 percent of the total wastes received) such as construction and demolition debris, oil spill debris, expired or off-spec packaged or unpackaged consumable goods (e.g. pharmaceuticals), consumer products, waste materials containing oil, used oil and filters and certain other wastes similar to MSW. The precise nature of the wastes is detailed in the draft permit package. By limiting the amount of segregated materials combusted at the facility, the Department has reasonable assurance that the overall composition of the wastes burned will be within the typical characteristics of MSW in terms of heating value, moisture, ash, and emissions characteristics.

Presently, the permitted waste throughput is 1200 TPD for the facility on an average annualized basis. The maximum allowable heat input rate is 165 mmBtu/hr at a daily waste throughput of 1,320 TPD (440 TPD per unit). The modified permit will, upon presentation of an engineering evaluation to the Department by the boiler manufacturer or operator, allow further increases of approximately 5 percent in short-term heat input, steam production, and waste throughput with no change in annual waste throughput limits.

The Department will issue the FINAL Permit Modification, in accordance with the conditions of the DRAFT Permit Modification unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed DRAFT Permit Modification issuance action for a period of thirty (30) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT Permit Modification, the Department shall issue a Revised DRAFT Permit Modification and require, if applicable, another Public Notice.

The Department will issue FINAL Permit Modification with the conditions of the DRAFT Permit Modification unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S. The procedures for petitioning for a hearing are set forth below. Mediation is not available for this action.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 904/488-9370, fax: 904/487-4938. Petitions must be filed within fourteen days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the Department's action or proposed action addressed in this notice of intent.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida, 32301
Telephone: 904/488-1344
Fax: 904/922-6979

Department of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

Hillsborough County Environmental
Protection Commission
1900 Ninth Avenue
Tampa, Florida 33605
Telephone: 813/272-5960
Fax: 813/272-5157

The complete project file includes the Draft Permit Modification, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 904/488-1344, for additional information.

NOTICE TO THE PUBLIC
IN THE MATTER OF

TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

HILLSBOROUGH COUNTY RESOURCE RECOVERY FACILITY
TAMPA, HILLSBOROUGH COUNTY, FLORIDA

Resource Recovery Facility
Air Pollution Control Project

PSD-FL-121(B)
Facility ID No. 0570261

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

January 27, 1998

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. APPLICATION INFORMATION

1.1 Applicant Name and Address

Hillsborough County
601 E. Kennedy
Tampa, Florida 33602

1.2 Reviewing and Process Schedule:

09-16-97: Date of receipt of application
10-14-97: DEP completeness request
11-17-97: Application deemed complete/sufficient
01-14-98: Extension of 60-day limit to process site certification
application requiring PSD review
01-27-98: Issued Intent

2. FACILITY INFORMATION

2.1 Facility Location

The Hillsborough County Resource Recovery Facility is located at 350 Falkenburg Road in Tampa. This site is between 75 and 100 kilometers from the Chassahowitzka National Wilderness Area, a Class I PSD Area. The UTM coordinates of this facility are Zone 17, 368.20 km East and 3092.70 km North.

2.2 Standard Industrial Classification Codes (SIC)

Major Group No.	49	Electric, Gas and Sanitary Services
Industry Group No.	495	Sanitary Services
Industry Group No.	4953	Refuse Systems

2.3 Facility Category

This facility makes electricity by burning solid waste in three furnaces, recovering the heat as steam, and expanding it in a steam electrical generator. The solid waste burned is typically characterized as "refuse such as trash and garbage" or as municipal solid waste (MSW). The facility is permitted to burn up to 440 tons per day (400 TPD on an average annualized basis) in each of three units. Certain segregated wastes consisting of materials typically found in MSW are mixed into the waste while maintaining the overall characteristics of the waste within the typical ranges of heat and moisture content as well as emission characteristics. The electricity is sold to Tampa Electric Company.

The facility is classified as a major or Title V source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x) carbon monoxide (CO), or volatile organic compounds (VOC) exceed 100 tons per year (TPY). It is also a major source because emissions of air toxics, such as hydrogen chloride (HCl) or hydrogen fluoride (HF), exceed 10 TPY individually or 25 TPY in the aggregate.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Municipal incinerators are included in the list of the 28 Major Source Categories per Table 62-212.400-1, F.A.C. Because emissions are greater than 100 TPY for at least one criteria pollutant, the facility is also a major facility with respect to Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD).

The facility was issued a PSD permit, including a determination of Best Available Control Technology (BACT), by the United States Environmental Protection Agency (EPA) on July 7, 1986.

Per Table 62-212.400-2, modifications at existing major facilities resulting in "Significant Emission Rate" increases greater than: 100 TPY of CO; 40 TPY of NO_x, VOC, or SO₂; 25/15 TPY of PM/PM₁₀; 7 TPY of sulfuric acid mist (SAM); 0.1 TPY of mercury (Hg); 3 TPY of fluorides (F), or 0.6 TPY of lead (Pb) also require a PSD permit and a BACT determination.

3. PROCESS DESCRIPTION

The facility is a waste-to-energy installation employing mass burning of solid waste, heat recovery as superheated steam, and power generation in a steam electric cycle. Other than landfilling, this is the most common method of solid waste disposal in the United States. There are twelve such facilities in the State of Florida. Following is a description of the process (refer to Figures 1 and 2):

Waste is received via transfer, roll-off, or collection vehicles. Upon arrival, each vehicle is weighed at the scale house and the waste is categorized. Any unacceptable waste is diverted at this time. All acceptable waste is taken to the Refuse Receiving Building, where it is deposited onto the tipping floor or into the Refuse Storage Pit. The refuse is stored at this location until needed to charge the combustion units.

Charging of the combustion units is accomplished using overhead cranes equipped with "orange peel" grapples. These stack, mix, and relocate waste within the pit and transfer it into the feed hoppers serving each unit. The waste enters the three refuse-fired steam generators, each of which consists of an integrated mass-burn stoker furnace and waterwall boiler. Hydraulically operated feeders push the waste onto "stoker grates". The stoker grates are sloped downward and operate with a reverse-reciprocating action which agitates the burning refuse and moves it along the grates.

Combustion air is drawn from the refuse tipping area (assisting in odor control) and conveyed through the gas side of the air preheater and into the refuse-fired generators where the waste is combusted. Exhaust gases from the refuse-fired generators pass through an economizer unit and are ducted to the air pollution control system that presently consists of an electrostatic precipitator (ESP) but that will be replaced by the system shown in the diagrams. Treated gases are exhausted to the atmosphere through three individual flues within a single 220 foot stack. Bottom ash from the furnaces is removed, quenched and processed for metal recovery and disposal.

The superheated steam enters a single, three-stage turbine where it is expanded. The turbine powers a single 29 megawatt electric power generator. The electric power is introduced into

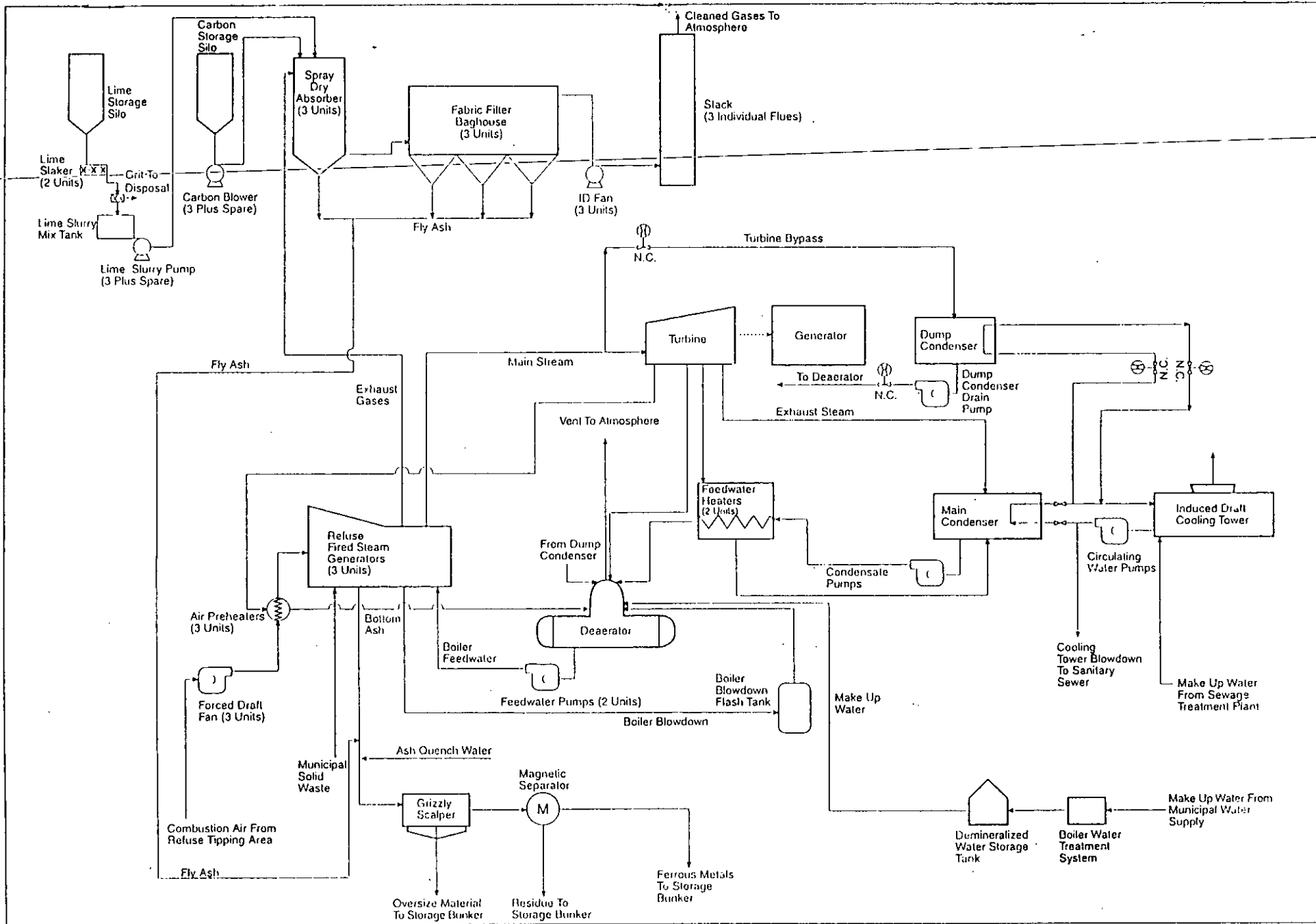
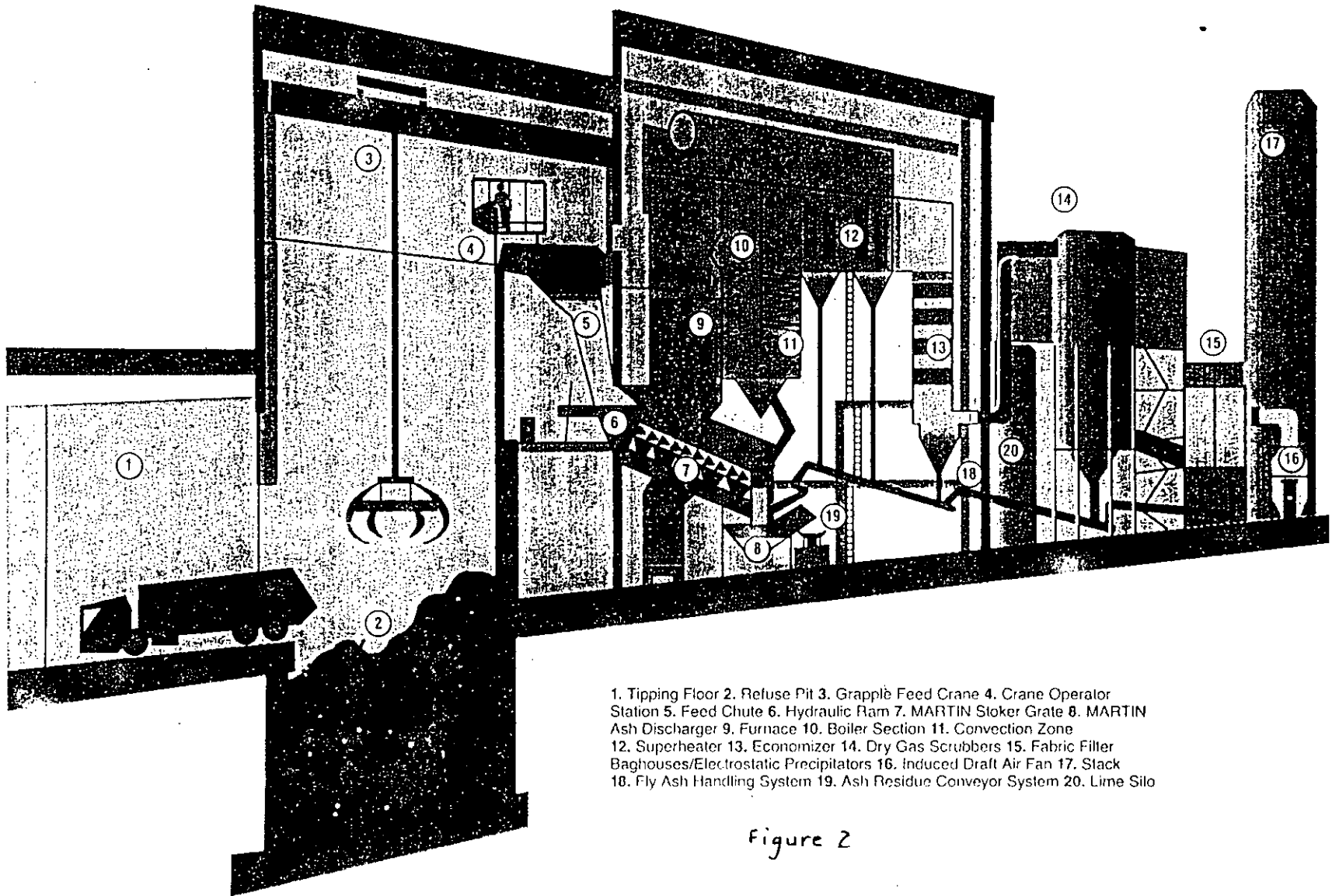


Figure / Hillsborough County Solid Waste Resource Recovery Facility Overall Process Flow Diagram



1. Tipping Floor 2. Refuse Pit 3. Grapple Feed Crane 4. Crane Operator Station 5. Feed Chute 6. Hydraulic Ram 7. MARTIN Stoker Grate 8. MARTIN Ash Discharger 9. Furnace 10. Boiler Section 11. Convection Zone 12. Superheater 13. Economizer 14. Dry Gas Scrubbers 15. Fabric Filter Baghouses/Electrostatic Precipitators 16. Induced Draft Air Fan 17. Stack 18. Fly Ash Handling System 19. Ash Residue Conveyor System 20. Lime Silo

Figure 2

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

the electrical grid and is purchased by Tampa Electric Company. Exhaust steam from the turbine is condensed and the water is cooled in an evaporative cooling tower. Tower blowdown is sent to the sanitary sewer and make-up water to the tower is provided from a sewage treatment plant. Boiler make-up water is provided from the municipal water supply. It undergoes treatment including demineralization. It is transferred to the deaerator, which also receives water from the condensers, air preheaters, and feedwater heaters. Boiler feedwater is provided from the deaerator.

4. PROJECT DESCRIPTION

The applicant described the project as "replacement of the air pollution control equipment." The purpose of the project is to comply with 40CFR60, Subpart Cb - Emission Guideline and Compliance Times for Municipal Waste Combustors That Are Constructed on or Before December 19, 1995. The Emission Guideline for Municipal Waste Combustors (MWCs) was developed pursuant to Section 129 (Solid Waste Combustion) of the Clean Air Act as amended in 1990. These requirements are incorporated in Department Rule 62-204.800(8), F.A.C.

The existing ESPs will be replaced with the spray dryer absorbers, fabric filters, activated carbon injection system, and selective non-catalytic reduction system (SNCR). The arrangement is depicted in Figures 1 and 2. Combustion gases in the MWCs will be treated by the SNCR system (not shown) that involves injection of liquid ammonia (NH_3) or urea. Reaction between the NH_3 or urea and NO_x in the combustion gas exhaust results in formation of normal molecular nitrogen.

The gases are then contacted in a vessel with a slurry of sprayed lime (calcium hydroxide). Acid gases, including hydrogen fluoride (HF), SO_2 and HCl, are neutralized and absorbed into the spray. Activated carbon is also injected into the flue gas ahead of the absorbers for the adsorption of mercury. The spray is dried and conveyed by the hot exhaust gases to the fabric filter baghouses where particulate matter, including flyash and product from the absorbers, is removed. Additional pollutant removal occurs on the filter cake which builds up within the baghouses. Clean exhaust gases exit the stack. The flyash is conveyed to the bottom ash handling system for further handling.

The induced draft fans prior to the stack will be replaced to compensate for the additional pressure drop through the control equipment. Upgraded auxiliary fuel burners will be installed in the combustion zone of each furnace. The project provides for continuous emission monitors (CEMs) for SO_2 , NO_x , and CO. Additional process monitors to insure that the potential for dioxin/furan formation is minimized and that the pollution control equipment functions effectively will also be installed. These will monitor process and control equipment temperature, pressure drop, steam production, carbon injection rates, oxygen (O_2), etc.

5. ADDITIONAL REQUESTS

In addition to the physical changes described above, a number of revisions are requested which require modifications of the existing PSD Permit. These include:

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

- Specifying steam flow as the main process throughput parameter to be monitored.
- Increasing the rated short-term capacity of each unit from 440 to 460 TPD, heat input from 165 to 172.5 million Btu per hour (mmBtu/hr), and setting steam flow at 102,000 pounds per hour (lb/hr).
- Providing for combustion of segregated waste streams and defining more precisely the types of wastes that may be burned.

5.1 Steam Flow

The first request is essentially to designate steam as the main throughput parameter on a short-term basis. This is the most precise and accurate parameter to monitor load and is easily determined. It is also consistent with both the most recent regulatory requirements and industry practice. However, because the plant was authorized and the furnaces are rated on a mass basis, it is still important to maintain some form of mass limit. This is most accurately accomplished by a long-term average based on the weight of actual material delivered to the facility. Short term throughput rates can be estimated from the short-term steam production and applicable heating values for the materials combusted.

5.2 Operating Window

The County essentially wishes to operate the plant within a so-called 115 percent (%) "operating window," normalized around the previous nominal capacity of 400 TPD at a waste heat content of 4,500 Btu per pound (Btu/lb). Because of the wide range in waste heat content, the County wants sufficient flexibility to burn more waste to achieve the desired steam production, particularly when waste heat content is low. This is a common and recognized industrial and regulatory practice. Typically only a 110% percent operating window is allowed, such as by the present permit. The County's request is represented by the following schedule of waste throughput and heat input and heat capacity:

MSW THROUGHPUT (TPD)	HEAT CAPACITY (Btu/lb)	HEAT INPUT (mmBtu/hr)
180	6000	90
240	6000	120
345	6000	172.5 ¹
240	4500	90
320	4500	120
400	4500	150
460	4500	172.5 ¹
284	3800	90
379	3800	120
460	3800	145.7

1. Equivalent to 101,700 lb/hr of steam at 1,379 Btu/lb and 68.3% boiler efficiency

The County will provide the Department with an updated engineering assessment (from Riley or Ogden-Martin's engineering group) of the maximum rated capacities of the units in terms of waste throughput, heat input and steam flow consistent with the above operating window.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Until the analysis is provided, the present waste throughput and equivalent heat input and maximum steam limit representative of the present 110% window apply.

5.3 Wastes/Fuels

The units were originally permitted to utilize "refuse such as garbage and trash" as defined in the Department's solid waste rules. The County requests that the modified permit specify the wastes as solid waste including municipal solid waste (MSW) as defined at 40CFR60.51b and Section 403.706 (5), F.A.C. and certain segregated wastes, including:

- 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. Construction and demolition debris.
- E. Oil spill debris.
- F. Waste tires, provided that the waste tires do not exceed 3% of the facility's total fuel.
- G. 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 person care products cosmetics, foodstuffs, nutritional supplements, returned goods, and controlled substances.
- H. Consumer-packaged products intended for human or domesticated animal use of application but not consumption. Such items or materials include but are not limited to carpet cleaners, household or bathroom cleaners, polishes, waxes and detergents.
- I. Waste materials that are generated in the manufacture of items in categories G. or H., above and are functionally or commercially useless (expired, rejected or spent); or 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.
- J. Packaging materials and containers.
- K. Clothing, natural and synthetic fibers, fabric remnants, and similar debris, including but not limited to aprons and gloves.
- L. Rugs, carpets, and floor coverings, but not asbestos-containing materials or polyethylene or polyurethane vinyl floor coverings.
- M. Waste materials that contain oil from: (a) the routine cleanup of industrial or commercial establishments and machinery; or (b) spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

- N. Used oil and used oil filters.
- O. Waste materials generated by manufacturing, industrial, commercial or agricultural activities, provided that these items or materials are substantially similar to items or materials that are found routinely in MSW.
- P. 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. PROJECTED EMISSIONS

6.1 Emission limits

The maximum allowable short-term emission limits for the facility before and after implementation of the project are as follows:

POLLUTANT	PERMITTED LIMIT	PROPOSED LIMIT
Particulate Matter (PM)	0.021 gr/dscf @ 12% CO ₂	0.012 gr/dscf @ 7% O ₂
Sulfur Dioxide (SO ₂)	0.17 gr/dscf @ 12% CO ₂ (24-hr) 0.45 gr/dscf @ 12% CO ₂ (3-hr)	29 ppmdv @ 7% O ₂ or 75% removal
Sulfuric Acid Mist (H ₂ SO ₄ or SAM)	none ¹	none
Nitrogen Oxides (NO _x)	404 ppmdv @ 12% CO ₂ (24-hr)	205 ppmdv @ 7% O ₂ (24-hr)
Carbon Monoxide (CO)	0.093 gr/dscf @ 12% CO ₂	100 ppmdv @ 7% O ₂ (4-hr)
Volatile Organic Compounds (VOC)	0.01 gr/dscf @ 12% CO ₂	none - CO is surrogate
Lead (Pb)	0.00104 gr/dscf @ 12% CO ₂	440 ug/dscm @ 7% O ₂
Mercury (Hg)	2200 grams/day (facility)	70 ug/dscm @ 7% O ₂ or 85% removal
Cadmium (Cd)	None	40 ug/dscm @ 7% O ₂
Beryllium (Be)	0.00000068 gr/dscf @ 12% CO ₂	1.48 ug/dscm @ 7% O ₂
Hydrogen Chloride (HCl)	None	29 ppmdv @ 7% O ₂ or 95% removal
Hydrogen Fluoride (HF)	0.0031 gr/dscf @ 12% CO ₂	6.74 mg/dscm @ 7% O ₂
Dioxins/Furans	None	30 ng/dscm @ 7% O ₂
Ammonia (NH ₃)	None	30 ng/dscm @ 7% O ₂

1. Original SAM limit in EPA permit PSD-FL-104 (1986) was 0.004 gr/dscf. County requested revision to 0.072 gr/dscf in permit PSD-FL-121 (1987). The limit was deleted.

6.2 Annual Emissions

Permitted and estimated past actual emissions in tons per year (TPY) compared with future potential emissions following implementation of the project for PSD regulated pollutants are as follows¹:

POLLUTANT	PERMITTED	ACTUAL ¹	FUTURE	CHANGE	PSD SIGN
Particulate Matter (PM)	92	24.7	53 ⁺ or 11 ⁻	28.3 ⁺ or -14 ⁻	25
Particulate Matter (PM ₁₀)	92	24.7	53 ⁺ or 11 ⁻	28.3 ⁺ or -14 ⁻	15
Sulfur Dioxide (SO ₂)	724	685	427	-258	40
Sulfuric Acid Mist (SAM)	none	284 ⁺ or 32 ⁻	11 ⁺	-273 ⁻ or -21 ⁻	7
Nitrogen oxides (NO _x)	1439	1115	762	-353	40
Carbon Monoxide (CO)	396	29	226 ⁺ or 80 ⁻	197 ⁺ or 51 ⁻	100
Volatile Organic Compounds (VOC)	43.8	281 ⁻ or 8 ⁻	10 ⁻	-271 ⁻ or 2 ⁻	40
Lead (Pb)	4.4	0.54	0.86	-0.32	0.6
Mercury (Hg)	0.88	0.44	0.14	-1.1	0.1
Beryllium (Be)	0.0029	0.00021	0.0029 ⁺	0.0027 ⁺ or 0 ⁻	0.0004
Fluoride (F)	13.2	7.4	13.1 ⁺ or 1 ⁻	5.7 ⁺ or -6.4 ⁻	3

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. Past actual and future potential emissions are detailed in the Hillsborough County Solid Waste Energy Recovery Facility's application submitted on September 16, 1997 and additional information response received on November 17, 1997. Based on 8322 hours of operation.
2. Based on tests conducted in April, 1987 and reported as erroneous.
3. Based on tests conducted in June, 1987.
4. Based on requested future permitted emissions.
5. Based on future representative actual annual emissions. Estimated from facilities with similar controls.

A comparison of future potential emissions with past actual emissions indicates that the potential exists for PSD-significant increases of PM/PM₁₀, CO, and F. A comparison of estimated future representative actual annual emissions indicates there will not be PSD-significant increases for any pollutant.

7. RULE APPLICABILITY

Because the project is expected to reduce air emissions it would not normally be considered a modification under Chapters 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). However the applicant plans to increase the production rate by the expanded operating window and plans to burn a more varied slate of wastes, thus creating at least the potential for an emission increase of at least one air pollutant. Therefore the project must be assessed for permitting requirements and preconstruction review requirements. Because some of these changes, including the proposed emission limits, affect existing PSD permit conditions, a permit modification is required whether or not the project constitutes a facility or source modification.

The facility is located in an area (Hillsborough County) designated "unclassifiable" for SO₂, "maintenance" for Ozone (O₃), PM, and lead (Pb), and "attainment" for all the other criteria pollutants (Rule 62-204.360, F.A.C.).

The proposed project, without the additional requests or requested deletion of the VOC BACT limit, would not be subject to the PSD regulations under Rule 62-212.400(2)(a)2., F.A.C. A pollution control project that is added, replaced, or used at an existing electric utility steam generating unit and that meets the requirements of 40 CFR 52.21 (b) (2)(iii)(h) is not subject to the preconstruction review requirements of this rule.

Pursuant to 40 CFR 52.21 (b)(2)(iii)(h), "a physical change or change in the method of operation shall not include the addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless the Administrator determines that such addition, replacement, or use renders the unit less environmentally beneficial, or except: (1) When the Administrator has reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any criteria pollutant over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of Title I, if any, and (2) The Administrator determines that the increase will cause or contribute to a violation of any national ambient air quality standard or PSD increment, or visibility limitation".

Despite the small production increase and more varied waste slate requested concurrently with the control project, actual emissions of PM, CO, F, VOC and SAM will probably decrease.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

However, a comparison of past actual to future potential emissions (refer to Section 6.2) indicates small, but significant increases with respect to PSD of PM, CO, and F, which are partly due to the required comparison methodology. Because the three combustors and the single turbine and generator comprise an *electric utility steam generating unit* with a capacity greater than 25 megawatts, the Department can alternatively review PSD applicability by comparing past actual emissions with *representative future actual annual emissions*. Such comparisons indicate decreases or insignificant increases in all of these pollutants.

The main rules applicable to this project are 40CFR60, Subpart Cb - Emission Guideline and Compliance Times for Municipal Waste Combustors That Are Constructed on or Before December 19, 1995 (the Emission Guideline) and Rule 62-296.416, F.A.C., Waste-to-Energy Facilities. Physical or operational changes made to an existing unit primarily for the purpose of compliance with the Emission Guideline are not considered in determining whether the unit is a modified or reconstructed facility under 40CFR60, Subparts Ea or Eb. The latter subparts are Standards of Performance for MWCs on which construction commenced after December 20, 1989 and September 20, 1994, respectively. The Emission Guideline and the other Subparts are all adopted by reference in Rule 62-204.800(7) and (8), F.A.C.

This facility is not subject to the Maximum Achievable Control Technology (MACT) for Hazardous Air Pollutants (HAPs) requirements pursuant to Section 112(g) of the Clean Air Act since replacing the air pollution control equipment does not constitute reconstruction of a major source. The Emission Guideline under Subpart Cb, with which the facility will comply, was developed pursuant to Section 129 (Solid Waste Combustion) of the Clean Air Act as amended in 1990. It requires and achieves the same objectives as MACT for existing facilities.

This facility shall comply with all applicable provisions of the following regulations:

- 40 CFR 60 Subpart Cb Emissions Guidelines and Compliance Times for Existing Municipal Waste Combustors Constructed on or Before December 19, 1995.
- 40 CFR 51 Subpart P Protection of Visibility.
- 40 CFR 60, Subpart Db Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.
- 40 CFR 60, Subpart E Standards of Performance for Incinerators.
- 40 CFR 60, Subpart A General Provisions
- 40 CFR 61, Subpart C National Emission Standard for Beryllium
- 40 CFR 64 Compliance Assurance Monitoring
- 40 CFR 50 National Primary and Secondary Ambient Air Quality Standards

This facility is also subject to the applicable requirements related to used fuels and wastes given in 40CFR279 and 40CFR261 (July 1996 version), which are adopted by reference in Chapters 62-710 and 730, F.A.C.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The emission units affected by this replacement shall comply with all applicable provisions of the Florida Administrative Code (including applicable portions of the Code of Federal Regulations) and, specifically, the following chapters and rules:

- Chapter 62-4 Permits
- Rule 62-204.220 Ambient Air Quality Protection
- Rule 62-204.240 Ambient Air Quality Standards
- Rule 62-204.260 Prevention of Significant Deterioration Increments
- Rule 62-204.360 Designation of Prevention of Significant Deterioration Areas
- Rule 62-204.800 Federal Regulations Adopted by Reference
- Rule 62-210.300 Permits Required
- Rule 62-210.350 Public Notice and Comments
- Rule 62-210.370 Reports
- Rule 62-210.550 Stack Height Policy
- Rule 62-210.650 Circumvention
- Rule 62-210.700 Excess Emissions
- Rule 62-210.900 Forms and Instructions
- Rule 62-212.300 General Preconstruction Review Requirements
- Rule 62-212.400 Prevention of Significant Deterioration
- Rule 62-212.410 Best Available Control Technology
- Rule 62-296.320 General Pollutant Emission Limiting Standards
- Rule 62-297.310 General Test Requirements
- Rule 62-297.400 EPA Methods Adopted by Reference
- Rule 62-297.401 EPA Test Procedures
- Rule 62-296.410(3) Specific Emission Limiting and Performance Standards Requirements for Incinerators
- Rule 62-296.416 Waste to Energy Facilities
- Rule 62-296.700 Reasonably Available Control Technology (RACT)
- Rule 62-297.520 EPA Performance Specifications
- Rule 62-297.570 Test Reports
- Chapter 62-256 Open Burning and Frost Protection Fires

8. CONTROL TECHNOLOGY ASSESSMENT

8.1 Particulate Matter (PM)

The fabric filter baghouses will replace the existing ESPs and will be designed to control particulate emission including trace heavy metals. These devices are specifically required by the Emission Guideline. These will also provide a measure of additional acid gas control as the flue gases pass through the unreacted lime captured on filter bags.

The proposed limit of 0.012 grains per dry standard cubic feet at 7 percent oxygen (gr/dscf @ 7% O₂) is lower than the presently permitted value of 0.021 gr/dscf @ 12% carbon dioxide (CO₂). The present limit is based on EPA's BACT determination of 1986. According to

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

actual data submitted by the County, the existing ESP has performed much better (0.0065 gr/dscf @ 12% CO₂) than required and even better than required by the Emissions Guideline. For that reason, a PSD-significant increase occurs (per Section 6.2) although permitted emissions will be reduced and the new control equipment will be superior to the old.

According to information presented by the County, the Pasco County facility, also operated by Ogden-Martin, achieves even lower emissions with the same type of fabric filters that will be installed at the Hillsborough County facility. Annual PM/PM₁₀ emissions at Ogden-Martin, Pasco county were only 3 TPY.

Since the Pasco County facility is rated at only 1050 TPY, equivalent emissions for the Hillsborough County facility would be approximately 3.5 TPY. Even if the County facility actually emits at three times the adjusted rate of the Ogden Pasco facility, future emissions will still decrease by 14 tons per year (see Section 6.2). Consequently, the Department has reasonable assurance that "*representative actual annual emissions*" will, in fact, decrease with respect to PSD. This type of comparison applies to electric steam generating units, which is a designation applicable to the County facility. The Department will not, therefore, require the County to take a lower emission limit (which would require additional cost to guarantee) than required by the guideline or the original BACT determination. Instead, the County will be required to make demonstrations that a PSD-significant increase did not occur by reporting future representative actual annual emissions.

8.2 Acid Gases

SO₂, HCl, sulfur trioxide (SO₃), sulfuric acid mist (SAM or H₂SO₄), and hydrogen fluoride (HF) are acid gases characteristic of municipal solid waste combustion. SO₂ is formed in the furnace when sulfur in the solid waste oxidizes during combustion. The spray dryer absorber together with the fabric filter system will be used to reduce SO₂ emissions by contacting the exhaust gases with an aerosol of slaked lime. This technology is a specific requirement of the Emission Guideline. The reaction will produce a dried, relatively free-flowing powder, consisting of unreacted lime, salts, and fly ash. The most prevalent salts will be calcium sulfite (CaSO₃), and calcium sulfate (CaSO₄). The absorber will also provide a measure of control for organics and volatile metal emissions by cooling off the flue gases.

HCl and HF are formed during the combustion of waste materials containing chlorinated compounds (typically plastics) and fluorinated compounds (e.g. Teflon and toothpaste). The same absorption system will be used to control emissions of these acid gases. The products are ultimately captured as particulate calcium chloride (CaCl₂), or calcium fluoride (CaF) in the fabric filter baghouses.

The Department expects SO₂ emissions to be substantially less than permitted based on the performance of other MWCs employing similar controls. The installation of the SO₂ CEMS will continuously record emissions data and insure that SO₂ emission limit will not be exceeded. The acid gas control equipment is capable of achieving at least the required 75 % removal efficiency for SO₂ and over 95% for HCl.

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Per Section 6.2, emissions of fluoride appear to increase significantly with respect to PSD based on a "past actual to future potential" comparison. Because the project will add acid gas control, which will control hydrogen fluoride (HF), the Department expects annual emissions of fluoride to decline rather than increase by a PSD-significant amount. Based on Department records, the 1050 TPD Ogden-Martin Pasco facility emits 0.26 TPY of F. Scaling this value up to that of the 1200 TPD County facility and multiplying by a safety factor of three results in a *future representative actual annual emission* estimate of 1 TPY for F. This still represents a substantial decrease in emissions with respect to PSD.

Therefore a lower limit than proposed by the County will not be imposed for the same reason as given above for the PM emissions. The original BACT limit for fluoride 0.0031 gr/dscf @ 12% CO₂ will be retained in the metric equivalent of 6.7 mg/dscm @ 7% O₂. Instead, the County will need to make demonstrations a PSD-significant increase did not occur by reporting future "representative actual annual emissions."

The original permit contained a limit on sulfuric acid mist (SAM) with which the facility apparently failed to comply during testing performed in 1987. SAM is formed from further oxidation of SO₂ to sulfur trioxide (SO₃) and subsequent hydration to H₂SO₄. The spray dryer and fabric filter system will minimize emissions of SAM. Injection of ammonia or urea for NO_x control will further suppress SAM emissions and possibly interfere with their measurement.

SAM emissions from the similarly controlled 1200 TPD Ogden-Martin Lee County facility (same size as the Hillsborough County facility) were 3.7 TPY. Multiplying by a factor of three results in an estimate in representative actual annual emissions of 11 TPY for the County facility. This results in substantial decreases in SAM emissions. The Department has reasonable assurance that PSD is not triggered and will only require an initial test for SAM to demonstrate low emissions. The protocol and method must be submitted to the Department in advance for approval.

8.3 Nitrogen Oxides

Nitrogen oxides (NO_x) are produced in all combustion processes. There are two mechanisms by which NO_x are formed during combustion:

- Thermal NO_x are formed by high temperature oxidation of nitrogen in the combustion air.
- Fuel NO_x are formed by the oxidation of nitrogen in the fuel.

The selective non-catalytic reduction system (SNCR) is designed to provide a high degree of NO_x control while minimizing the amount of ammonia emissions (slip). The system will store, convey, and inject aqueous ammonia (NH₃) or urea into the first pass of each boiler immediately above the combustion zone. Emission data from other MWCs injecting NH₃ (or urea) into the first pass of the boiler indicate that NO_x emissions can be reduced to the Emission Guideline requirement of 205 parts per million by volume (ppmv) on a routine basis. The installation of the NO_x CEMS will insure that the NO_x emission limit will not be exceeded.

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The ammonia "slip" limit for this level of NO_x control is estimated by the County to be less than 50 ppm, corrected to 7 percent O₂. The limit will be incorporated into the permit at the request of the County. There is no rule specifically related to ammonia. However the limit will help assure that there will be less potential of forming ammoniated salts and, therefore, less probability of plume opacity problems. The County may actually need to further minimize the ammonia slip to maintain the permitted opacity requirement.

8.4 Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)

CO and VOC are formed by the incomplete oxidation of carbon compounds in wastes and fuels. Some amount of CO is formed in all combustion processes in which carbon-containing fuel is burned. Compliance with the CO limit of 100 ppmv, corrected to 7 percent O₂ on a 4-hour block-average basis, will be determined by a CEM system.

Per Section 6.2, emissions of CO do not increase significantly based on a comparison of future representative actual annual emissions with past actual emissions. A similar analysis to that performed for PM, F, and SAM was performed for CO by evaluating emissions from similar Ogden-Martin facilities and scaling the results and then multiplying by three to fit the County facility. The Department will require the County to submit information in the future to show that emissions do not actually increase by more than 100 TPY.

The Emission Guideline does not require and the County has requested deletion of the original BACT VOC limit from the permit. According to Section 6.2, past actual emissions indicate that the unit initially did not achieve the VOC limit. A subsequent test indicated that the unit did comply with the determination. The Department's analysis indicates that representative actual annual emissions will decrease substantially. In fact the facility may not be a major facility for VOC in the future. The Department will maintain the limit in the permit and require at least one test to demonstrate compliance with the BACT determination. Thereafter, CO will be employed as a surrogate. This will insure that there will be no VOC emission increase due to burning a more varied slate of wastes. The pollution control project should be able to achieve at least the same level of VOC control as EPA determined was necessary for this facility in 1986.

8.5 Mercury (Hg)

Mercury is a trace metal found in solid waste. Its origin is attributable to many different waste materials. Within the temperature range of the combustion process for solid waste, mercury is found as a metallic vapor. The proposed activated carbon injection system will store, convey, and inject dry activated carbon into the flue gas stream immediately upstream of the spray dryer inlet or within the absorber chamber. This will further reduce potential mercury emissions. Emission data from other MWCs employing similar injection system in conjunction with spray dryer and fabric filters indicate that the Emission Guideline mercury outlet requirements of 70 micrograms per dry cubic meter (ug/dscm) or 85 percent removal are achievable on a routine basis. The carbon injection system will also help to minimize emissions of dioxins and furans.

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8.6 Lead (Pb), Cadmium (Cd), and Beryllium (Be)

Most trace metals found in solid waste are directly proportional to their content in the solid waste. Lead will liquefy during combustion. Due to its vapor pressure some volatilization will occur. Cooling in the spray dryer, condensation and solidification onto fly ash, and subsequent collection by the fabric filter system will occur. Some liquid lead will also become part of the bottom ash. The County banned disposal of small sealed lead acid batteries from the waste stream in 1987. Emissions of Pb are expected to decline further due to the proposed project.

Cd is present in both the combustible and non-combustible parts of the solid waste stream and is efficiently collected by the spray dryer and fabric filter system. The County also banned nickel-cadmium batteries from the waste stream in 1987. Emissions of Cd are also expected to decline further as a result of the project.

Beryllium can be present in trace quantities in both the combustible and non-combustible parts of the solid waste stream and will be efficiently collected in the fabric filter baghouses. Emission data in one set of three tests on one boiler at the facility has found no Be emissions at the detection limit of 5.3×10^{-8} grains per dry standard cubic foot (gr/dscf) corrected to 12 percent CO₂. This is an order of magnitude lower than the permitted limit of 6.8×10^{-7} gr/dscf @ 12% CO₂.

The present permitted emission limit is equivalent to about 25% of the allowable limit per 40CFR61, Subpart C - National Emission Standard for Beryllium. Based on the results of the previous testing and the installation of control equipment, the Department expects Be emissions to remain below PSD significant levels and probably below detectable levels. However, a comparison of past actual to future potential emissions still results in a PSD-significant increase in Be emissions. The County will need to make demonstrations a PSD-significant increase did not occur by reporting future "representative actual annual emissions."

Other trace metals are also controlled with the fabric filter system and compliance is verified by the PM standard. Fabric filter baghouses generally perform better than electrostatic precipitators in the removal of some of the non-PSD air pollutants.

8.7 MWC Organics

MWC organics are comprised of hazardous air pollutants known as dioxins and furans. These species are among the pollutants most specifically targeted by the Emission Guideline. There are characteristics of each part of the air pollution control system that minimize the potential for MWC organic formation or enhance their recovery.

Virtually all dioxins and furans organics are destroyed by high temperature combustion. Rapid quenching through the spray dryer system inhibits formation at intermediate temperatures. Removal of chlorides through the scrubbing of acid gases in the spray dryer system also reduces potential formation of dioxins and furans. Injection of activated carbon to control mercury will add yet another measure of dioxins and furans control.

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MWC organics can form within the particulate control equipment on fly ash, in the presence of excess oxygen, at temperatures above 450 degree Fahrenheit (F). Therefore, the Guideline requires operating the PM control device at temperatures which minimizes such formation. Most of what does form is removed by the fabric filter baghouse. Flue gas temperature will be monitored at the inlet of the PM control device. Compliance with maximum PM control device temperature requirements will be determined by a device to measure temperature on a continuous basis at the fabric filter inlet. Temperature will be calculated in a 4-hour block arithmetic averages.

Finally, the good combustion practices required to minimize CO emissions to comply with the Emission Guideline will further reduce the potential of dioxins and furans formation and MWC organics emissions. Continuous compliance monitoring for CO is a good surrogate for dioxins and furans which cannot be monitored continuously.

9. REASONABLE AVAILABLE CONTROL TECHNOLOGY EVALUATION (PM)

One of the requirements under the maintenance plan for the area is implementation of Reasonable Available Control Technology (RACT) pursuant to Rule 62-296.711, F.A.C.(c). The Department finds that the proposed opacity limit and EPA Method to determine compliance with this limit constitute RACT for particulate matter. The Emissions Guideline requirements for PM are at least as stringent as and therefore satisfy the RACT requirement for the combustion units.

Particulate emissions from the Lime Silo and Ash Conveyor System shall be limited as follows:

- Particulate emissions from the lime storage silos exhaust shall not exceed 0.015 grains per dry standard cubic foot (gr/dscf) based on the "front-half catch" during filling operations of the lime storage silo. Visible emissions shall not exceed 5% opacity.
- Particulate matter emissions from the activated carbon storage silo exhaust shall not exceed 0.015 gr/dscf (front-half catch) during filling operations of the activated carbon storage silo. Visible emissions shall not exceed 5% opacity.
- 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. The proposed emission limit of 5% opacity from ash handling operations and EPA Method 22 constitute RACT.
- The potential for dust generation by ash handling activities will be mitigated by quenching the ash prior to loading in ash transport trucks. In addition, all portions of the proposed facility (including the ash handling facility) which have the potential for fugitive emissions will be enclosed. 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

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

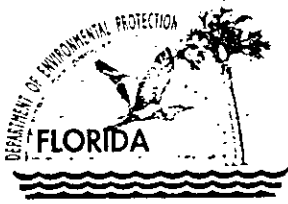
into the ash quenching system to minimize visible dust. The ash/residue in the Ash Handling Building shall remain sufficiently moist to prevent dust during storage and handling operations.

10. CONCLUSION

Based on the technical evaluation of the application and additional information submitted by Hillsborough County, the Department has made a preliminary determination that the proposed pollution control project will reduce emissions of air pollutants - particularly those considered to be hazardous air pollutants. The Department has reasonable assurance that the project will comply with all applicable state and federal air pollution regulations provided the allowable emissions limits are not exceeded and certain conditions are met. The general and specific conditions are listed in the attached draft conditions of approval.

For further details regarding this review, contact:

Teresa Heron, Review Engineer or
A. A. Linero, P.E. Administrator
New Source Review Section
Bureau of Air Regulation
850/488-1344



Department of Environmental Protection

DRAFT

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Virginia B. Wetherell
Secretary

PERMITTEE:

Hillsborough County
Resource Recovery Facility
601 E. Kennedy
Tampa, Florida 33602

FID No.	0570261
PSD No.	PSD-FL-121 (B)
SIC No.	4953
PPS No.	83-19
Expires:	July 31, 2002

Authorized Representative:
Daniel A. Kleman
County Administrator

PROJECT AND LOCATION:

Permit to replace 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 40CFR60, 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. Permit defines wastes which can be combusted and expands peak waste input to 115 percent of nominal capacity. The facility is located at 350 Falkenburg Road, Tampa, Hillsborough County. UTM coordinates are Zone 17; 368.20 km E : 3092.70 km N
Directions:

STATEMENT OF BASIS:

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297. The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

Attached appendix is part of this permit:

Appendix GC Construction Permit General Conditions

Howard L. Rhodes, Director
Division of Air Resources
Management

AIR CONSTRUCTION PERMIT PSD-FL-121(B) AND PA 83-19

SECTION I. FACILITY INFORMATION

SUBSECTION A. FACILITY DESCRIPTION

This existing facility consists of three mass-burn combustion units, with a nameplate (nominal) capacity to combust 400 tons per day (tpd) when burning solid waste with a heat content of 4,500 British thermal units (BTU) per pound (lb). Therefore, the facility has a nameplate (nominal) waste processing rate of 1,200 tpd (4,500 Btu/lb). The Facility generates electricity, and has an electrical generator with a nameplating rating of 29 megawatts for the entire Facility. Each upgraded air pollution system will consist of a spray dryer absorber (SDA), fabric filter baghouse (FF), activated carbon injection (ACI) unit, and a selective non-catalytic reduction (SNCR) system.

SUBSECTION B. REGULATORY CLASSIFICATION

This facility is listed in Table 62-212.400 of Chapter 62-212, F.A.C., "Major Facilities Categories". Stack and fugitives emissions of over 100 tons per year of particulate matter, carbon monoxide, volatile organic compounds, sulfur dioxide, and nitrogen oxides, characterize the installation as a major facility. The installation of the new air pollution control system will not subject this facility to PSD review under the requirement of Rule 62-212.400, F.A.C., since there is not an increase in actual emissions. As a Resource Recovery Facility (waste-to-energy facility), the affected emissions units are subject to applicable requirements of Rule 62-296.416, F.A.C. Waste to Energy and Rule 62-204.800, F.A.C., which incorporates 40 CFR 60 Subpart Db, Subpart Cb, Subpart E, and Subpart Eb.

SUBSECTION C. PERMIT SCHEDULE:

- (DATE) Notice of Intent published in [issue of Newspaper]
- 01/28/98 Issued Notice of Intent to issue Permit
- 11/17/97 Application deemed complete

SUBSECTION D. RELEVANT DOCUMENTS:

The documents listed below are the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

Application received (Bureau of Air Regulation) on September 16, 1997.

Department's letters dated October 14, 1997

Company letters dated November 17, 1997, January 9, 13, and 14, 1998

EPA's letters dated [Date(s)]

Department of Interior's letters dated [Date(s)]

Project: Upgrading of the Air Pollution Control System
 Facility ID No. 0570261
 SIC: 4953

Hillsborough County
 Resource Recovery Facility
 Tampa, Florida

AIR CONSTRUCTION PERMIT PSD-FL-121(B) AND PA 83-19

SECTION II. EMISSION UNIT(S) GENERAL REQUIREMENTS

SUBSECTION A. ADMINISTRATIVE

- A.1 Regulating Agencies: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR) and the Power Plant Siting office, Florida Department of Environmental Protection (FDEP) at 2600 Blirstone Road, Tallahassee, Florida 32399-2400 and phone number (850)488-1344. All documents related to reports, tests, and notifications should be submitted to the DEP Southwest District office (DEPSW), 3804 Coconut Palm Drive, Tampa, Florida 33619 and phone number 813/744-6100 and the Environmental Protection Commission of Hillsborough County (HPCHC), 1900 Ninth Avenue, Tampa, Florida 33605 and phone number 813/272-5960.
- A.2 General Conditions: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. **[Rule 62-4.160, F.A.C.]**
- A.3 Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
- A.4 Forms and Application Procedures: 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. **[Rule 62-210.900, F.A.C.]**
- A.5 Expiration: 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. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. **[40 CFR 52.21 (r)(2)]**
- A.6 Application for Title V Permit: An application for a modification of the Title V operating permit, pursuant to Chapter 62-213, F.A.C., must be submitted to the DEP's Bureau of Air Regulation, and a copy to [Department Southwest District office (DEPSW) and the Hillsborough County Environmental Protection Commission (HCEPC)]. **[Chapter 62-213, F.A.C.]**
- A.7 New or Additional Conditions: 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.

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SUBSECTION B. CONSTRUCTION REQUIREMENTS

- B.1 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. and Florida Administrative Code Chapters 62-4, 62-103, 62-204, 62-212, 62-213, 62-296, 62-297 and the Code of Federal Regulations Section 40, Part 60, adopted by reference in the Florida Administrative Code (F.A.C.) regulations [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.].

SUBSECTION C. OPERATIONAL REQUIREMENTS

- C.1 Changes/Modifications: 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.* [Rule 62-4.030, 62-210.300 and 62-4.070(3), F.A.C.]
- C.2 Plant Operation - Problems: 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 Southwest District office (DEPSW) and the Hillsborough County Environmental Protection Commission (HCEPC) 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. [Rule 62-4.130, F.A.C.]
- C.3 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 Eb, and procedures as established by the equipment manufacturer. All operators (including supervisors) of air pollution control device shall be properly trained and certified in plan specific equipment. A list of all such certified personnel shall be submitted to the DEP Southwest District office. Department staff

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SECTION II. EMISSION UNIT(S) GENERAL REQUIREMENTS

shall be given notice of any training sessions related to operation and maintenance of air pollution control devices. [Rule 62-204.800(8), F.A.C. and 62-4.070 (3), F.A.C.]

- C.4 Exceptions and Approval of Alternate Procedures and Requirements: 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.**

SUBSECTION D. MONITORING OF OPERATIONS

Determination of Process Variables

- D.1 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.
- D.2 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. [Rule 62-297.310(5), F.A.C.]

SUBSECTION E. OTHER REQUIREMENTS

- E.1 Waste Disposal: The owner or operator shall treat, store, and dispose of all liquid, solid, and hazardous wastes in accordance with all applicable Federal, State, and Local regulations. This air pollution permit does not preclude the permittee from securing any other types of required permits, licenses, or certifications.

SUBSECTION F. ELECTRIC UTILITY STEAM GENERATING UNIT ACTUAL EMISSIONS

- F.1 Requirement: 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 62-210.100 (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 62-210.100, F.A.C.]

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION A. 40 CFR 60, NSPS, GENERAL PROVISIONS

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:

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

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]

The affected emissions units shall comply with all applicable provisions of the 40 CFR 60, Subpart E and Subpart Cb, New Source Performance Standards 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.

[Rule 62-4.070(3), 62-204.800(8) and 62-296-416, F.A.C.; and PSD-FL-104, 121 and 121(A)].

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION B. SPECIFIC CONDITIONS:

The following Specific Conditions apply to the following emissions units:

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

OPERATIONAL REQUIREMENTS

B.1 The combustor boilers shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, and rated capacity.

B.2 Process Operating Rates

(a) 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.

[Rule 62-204.800(8), F.A.C., 40 CFR 60.31b; 60.38b; 60.51b, and 60.58b(j)]
 [PSD-FL-121/PA 83-19 and Rule 62-4.030(3), F.A.C.]

(b) 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 (115% of the nominal design rate capacity). The incinerators/boilers shall not be loaded in excess of their maximum operating capacity of 19.16 tons MSW per hour each, 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.

[Rule 62-204.800(8), F.A.C., 40 CFR 60.31b; 60.38b; 60.51b, and 60.58b(j)]
 [PSD-FL-121(A)/PA 83-19 and Rule 62-4.030(3), F.A.C.]

(c) 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.

B.3 Load Level: *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

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

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.

[Rule 62-204.800(8), F.A.C., 40 CFR 60.31b; 60.38b; 60.51b; 60.53b(b); and 60.58b(i)(8)]

B.4 Emission Control Equipment

Particulate Matter

The combustors particulate control baghouse shall be designed, constructed and operated to not to exceed a maximum emission rate of 27 mg/dscm corrected to 7 percent O₂. These baghouses/collectors shall be equipped with pressure drop monitoring equipment.

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 to exceed a maximum emission rate of 29 ppmvd corrected to 7 percent O₂, 24-hour block geometric mean, whichever is less stringent.

Carbon Injection

The carbon injection rate must be calculated and maintained in compliance with the requirements set forth in 40 CFR 60.58b(m).

Selective Non Catalytic Reduction System

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

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.

B.5 Stack Height: The height of the boiler exhaust stack shall not be less than 220 feet above grade.

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

B.6 Fuels

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).

B.6.1 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.

B.6.2 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.

B.6.3 The facility operator shall prepare and maintain records concerning the types 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 (B.6.6. and B.6.7). For the purposes of this permit, a segregated load is defined to mean a container or truck that is primarily or exclusively filled with a single item or type of waste material.

B.6.4 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

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

(c) record and maintain the CEMS data in accordance with 40 CFR 60.59b.

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

Natural gas may be used as fuel during warm-up, startup, shutdown, and malfunction periods, and at other times when necessary and consistent with good combustion practices.

B.6.5 Subject to the conditions and limitations contained in this permit, the following other solid waste materials 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.

B.6.6 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 No. B.25 below.

B.6.7 Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (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 specific condition No. B.25 below.

- (a) Construction and demolition debris.

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- (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 person 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.

B.7 Startup/Shutdown/Malfuncions

- (a) The emission limitations for this facility shall apply at all times, except during periods of warmup, startup, shutdown, or malfuncions, provided that the duration of startup, shutdown, or malfunction periods do not exceed 3 hours per occurrence. The duration of warmup periods is not limited. The startup period commences when the affected facility begins the continuous burning of MSW and does not include any warmup 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 warmup periods when MSW is not being fed to the combustor is not considered to be continuous burning. During all startups, shutdowns, and malfuncions, the owner/operator shall use best operational practices to minimize air pollutant emissions.

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(b) 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: (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.
[Rule 62-210.700, and 62-204.800(8), F.A.C., and 40 CFR 60.58b(a)(1)]

EMISSION LIMITATIONS

B.8 The following maximum emission limits shall not be exceeded:

POLLUTANT	EMISSION STANDARDS	LB/MMBtu	LB/HR	TON/YR
PM10 ⁽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 Fluorides	6.74 mg/dscm corrected to 7% O ₂	0.0059	1.00	4.43
Be ⁽³⁾ Beryllium	1.48 ug/dscm corrected to 7% O ₂	1.27E-06	2.18E-04	6.56E-04
Pb Lead	0.49 mg/dscm corrected to 7% O ₂	3.81E-04	0.065	0.288
Hg Mercury	70 ug/dscm or 85% reduction by weight corrected to 7% O ₂ (whichever is less stringent)	1.17E-04	0.020	0.288
SAM Sulfuric Acid Mist	To be demonstrated initially. Not to exceed 0.0072 gr/dscf corrected to 12% CO ₂			
SO₂ Sulfur Dioxide	29 ppmvd or 75% reduction by weight or volume corrected to 7% O ₂ (whichever is less stringent)	0.190	32.86	143.9
HCl Hydrochloric Acid	29 ppmvd or 95% reduction corrected to 7% O ₂ (whichever is less stringent)	0.099	17.00	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 ppmv corrected to 7% O ₂	0.101	17.4	76.26
NOx ⁽²⁾ Nitrogen Oxides	205 ppmv corrected to 7% O ₂	0.34	58.63	256
VOC ⁽⁴⁾ Volatile Organic Compounds	To be demonstrated during the initial performance test.			

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**The maximum allowable emission rates are applicable to each MWC combustor unit.
[Rules 62-4.030, and 62-296.416, F.A.C., 40 CFR 60.52b and 40 CFR 60.53b(b)]**

Notes:

- (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 do not apply to these emissions units because this permit subject 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 63.32 (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).

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 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 each auxiliary burner shall not exceed 3.45 lb/hr and 15.1 ton/yr. 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) of 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 per 12 months or less (i.e., annual capacity factor for natural gas of 10% or less as determined by 40 CFR 60.44b(d).

[40 CFR 60.44b, Rule 62-210.200, 62-204.800 (8) and 62-4.070(3), F.A.C.]

COMPLIANCE AND PERFORMANCE TESTING

B.9 Stack Testing

Compliance tests [initial (I) and annual (A)] for the pollutants listed in Specific Condition No. B.8 shall be performed by using the following 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 FDEP, in accordance with Chapter 62-297, F.A.C. Stack tests may also require Method 1, 2, 3, 3A/3B and 4 tests as appropriate.

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Testing of emissions shall be conducted with the emissions unit operating at capacity and under the different permitted fuel scenarios as specified under Specific Condition No. B.6. A test protocol shall be submitted for approval to the SW District office at least 90 days prior to testing. The permittee shall obtain the test data necessary to determine if these units are capable of burning all proposed fuels without exceeding the allowable emission limits. [Rule 62-204.800(8), F.A.C. and Chapter 62-297, F.A.C.]

Method 5 Determination of Particulate Matter Emissions 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 10 Determination of Carbon Monoxide Emissions from Stationary Sources (I) and (A).

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

or 13B

Method 18 Determination of Volatile Organic Concentrations (I).

or 25

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

Method 26** Determination of HCl emissions (I) and (A).

or 26A

Method 29** Determination of Beryllium, Lead, Cadmium, and Mercury from Stationary Sources (I) and (A).

* 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 60.386(b) and subject to prior approval by 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.

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

B.10. Test Procedures: shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration etc.) of the Florida Administrative Code Chapter 62-297.

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In addition to the three test runs conducted under normal operation, three compliance test runs shall be conducted annually under soot blowing conditions for particulate and VE. Each soot blowing test run shall be a representative of normal soot blowing operation. [Rule 62-204.800(8), F.A.C., and Rule 62-297.310, F.A.C.; and 40 CFR 60.38b (40 CFR 60.58b)]

- B.11 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. [Rule 62-297.310(6)(c), F.A.C.]
- B.12 Continuous Monitoring Compliance: Compliance with the emission limits for opacity, carbon monoxide (CO), nitrogen oxides (NO_x), sulfur dioxide (SO₂) and the operational parameters (steam production, etc.) listed in Specific Condition No. B.8 shall be demonstrated by continuous emission monitoring systems (CEMS). [Rule 62-204.800(8), F.A.C. and 40 CFR 60.38 (40 CFR 60.58b)]
- B.13 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 outcome of the monitor (in accordance with the ASME method described in 40 CFR, Subpart Cb and Eb). Steam (or feedwater) flow shall be calculated in 4-hour block arithmetic averages. [Rule 62-204.800(8), F.A.C., 40 CFR 60.31b; 60.38b; 60.51b; 60.53b(b); and 60.58b(i)(6)]
- B.14 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 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 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), F.A.C., and 40 CFR 60.38b; 60.51b, 60.53b and 60.58b(j)]
- B.15 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

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device in accordance with the requirements at 40 CFR 60, Subparts Cb (Eb). 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, Subparts Cb and Eb. Higher temperatures are allowed for testing purposes, as specified at 40 CFR 60.53b(c). [Rule 62-204.800(8), F.A.C. and 40 CFR 60.38b (40 CFR 60.53b(c) and 60.58b(i)(7) and (9)]

B.16 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. [Rule 62-204.800(8), F.A.C. and 40 CFR 60.58b(m)]

B.17 Auxiliary Burners Compliance:

(a) Auxiliary burners for each unit shall be fired only by natural gas, and consumption of natural gas shall be less than 10 percent of the total annual gross heat input. 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. Similar monthly records of the total gross heat input (MSW and natural gas combined) to each unit shall be maintained based on the measured MWC load levels or other operating data. 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 consumption of natural gas

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in each unit was less than 10 percent of the total annual gross heat input. [Rule 62-4.070(3), F.A.C., and 40 CFR 60.44b(d)]

- (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.
.. [Rule 62-4.070(3), F.A.C.]

SCHEDULE OF COMPLIANCE

The compliance schedule for each unit is provided below.

Increment 1: December 31, 1996 - applicable to units 1, 2 and 3.

Increment 2: December 31, 1997 - applicable to units 1, 2 and 3.

Increment 3: 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.

Increment 4: September 30, 2000 - applicable to units 1, 2 and 3.

Increment 5: December 10, 2000 - applicable to units 1, 2 and 3.

Closure Agreement: 36 months after EPA approval of this plan 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.

MONITORING OF OPERATIONS

- B.18 Continuous Emission Monitoring System(CEMS): CEMS with recorders shall be installed, calibrated, maintained and operated for each unit subject to review and approval by FDEP for the following pollutants and operational parameters:

Carbon Monoxide

Nitrogen Oxides

Opacity

Sulfur Dioxide

(SO₂ monitors shall be located both upstream of the scrubber and downstream of the baghouse, in order to calculate percent removal efficiency).

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Oxygen

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

Temperature of the combustion zone

Carbon injection system operating parameters

Slaked lime utilization

Power generation (MW)

[Rule 62-204.800(8), F.A.C. and 40 CFR 60.58b]

- B.19 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 Southwest District Office for review and approval at least 90 days prior to installation. Initial performance evaluations must be completed within 180 days after initial startup of each retrofitted unit. [Rule 62-204.800(8) and 62-4.070(3), F.A.C.]

RECORD KEEPING AND REPORTING REQUIREMENTS

B.20. Reports and Records:

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. [Rule 62-4.070(3), F.A.C.; Rule 62-4.160(14)(b), F.A.C. and 40 CFR 60.5 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:

- (a) Data collected from monitoring instruments, including CEM/COM systems, steam or feedwater flow measurements and PM control device temperatures;
- (b) Continuous steam flow or feedwater flow records on 4-hour block average;

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- (c) Records on daily solid waste charging rates and hours of operation derived from monthly truck scale data;
- (d) Amount of natural gas burned per unit in each 12 month period;
- (e) Results of all source tests or performance tests;
- (f) Amounts of ammonia, activated carbon, or other chemicals used for NOx and mercury control;
- (g) Calibration logs for all instruments;
- (h) Maintenance/repair logs for any work performed which is subject to this permit;
- (i) 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.

B.21 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 Subpart A. 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 [40 CFR 60.7(c)(1)].
- (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 measure adopted [40 CFR 60.7(c)(2)].

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- (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 (40 CFR 60.7(c)(3)).
- (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 FDEP and the HCEPC in accordance with Section 62-4.130, F.A.C.. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by FDEP and /or HCEPC [Rule 62-210.700(6), F.A.C.]. The FDEP and the HCEPC shall be notified within (1) 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 or the HCEPC may request a written summary report of the incident. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. **[Rules 62-4.130 and 62-210.700(6), F.A.C.]**

B.22 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.

B.23 Operating Reports: Before March 1st of each year, the owner or operator shall submit to the Department Southwest District office (DEPSW) and the Hillsborough County Environmental Protection Commission (HCEPC) the Annual Operating Report [DEP Form No. 62-210.900(5)], which summarizes operations for the previous calendar year. No later than February 1st 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 FDEP and the HCEPC offices the information required in 40 CFR 60.59b(h) on a semiannual basis. **[Rule 62-210.370(3), F.A.C. and 40 CFR 60.59(g) and if applicable 40 CFR 60.59b(h)]**

B.24 Sampling Reports: Drawings of testing facilities including sampling port locations as required by Section 62-297.310(8)(c) shall be submitted to the Southwest District Office for approval at least 60 days prior to construction of the sampling ports.

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- B.25 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 B.6:

Each segregated load of non-MSW materials, that is subject to the percentage weight limitation of specific condition B.6, 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.

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.

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.

OPERATOR TRAINING AND CERTIFICATION

B.26 Requirements

- (a) 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. [40 CFR 60.39b(c)(4) (ii) and 40 CFR 60.54b(c)].
- (b) 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

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certification program before the date that person assumes responsibility for operation of the facility. [40 CFR 60.39b(c)(4)(ii) and 40 CFR 60.54b(a) and (b)]

- (c) 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 [40 CFR 60.39b(4)(iii)(A)]. The owner or operator may request that the Department waive the requirements specified in 40 CFR 60.54(b)(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 [40 CFR 60.39b(4)(iii)(B)]. [40 CFR 60.39b(c)(4) and 40 CFR 60.54b(d)]
- (d) 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 60.54(f)]. The operating manual must be kept in a readily accessible location for all persons required to undergo training. [40 CFR 60.54b(e) and 40 CFR 60.54(f)]

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION C. SPECIFIC CONDITIONS:

The following Specific Conditions apply to the following emissions units:

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

EMISSION LIMITATIONS

C.1 Lime Silo and Ash Conveyor System:

Particulate emissions from these emissions units shall be limited as follows:

- (a) 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 C.3.
- (b) 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 C.3.
- (c) 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.
- (d) The potential for dust generation by ash handling activities will be mitigated by quenching the ash prior to loading in ash transport trucks. In addition, all portions of the proposed facility (including the ash handling facility) which have the potential for fugitive emissions will be enclosed. 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.

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

- (e) 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 C.3.

COMPLIANCE AND PERFORMANCE TESTING

C.2 Fugitives Emissions Compliance:

Method 22 Visual determination of Fugitives Emissions From Material Sources

- (a) 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.
- (b) Compliance testing for the Ash Handling Building vent, ash conveyor system, and the lime and carbon silos shall be conducted within 180 days of completion of construction and initial operation and annually thereafter, compliance testing for visible emissions shall be verified by annual tests following the date of completion of the initial stack test. All notification requirements of 40 CFR Part 60 shall be satisfied.

- C.3. Carbon and Lime Storage Silos PM Compliance Requirements: 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 an alternate standard of 5 percent opacity shall apply. Annual visible emission test shall be performed for each silo during filling operations using Method 9. 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 would require the permittee to perform a particulate stack test.

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS**SUBSECTION D. COMMON CONDITIONS:**

The following Specific Conditions apply to the following emissions units:

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

OPERATIONAL REQUIREMENTS

- D.1 These emissions units are allowed to operate continuously (8760 hours/year).
[Rule 62-210.200, F.A.C. Definitions-Potential to emit (PTE)]
- D.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. [Rule 62-296.320(2), F.A.C.]
- D.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.
- The duration of excess emissions from the lime silo or the carbon silo shall be minimized but in no case exceed 2 hours per occurrence
[Rule 62-210.700, F.A.C.]
- (b) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]
- (c) Within 90 days prior to operation of this facility, the permittee shall submit to the DEP Southwest District office an operational procedures manual that identifies and describes

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best operational practices that will be used during startup, shutdown, and malfunctions of this facility.

EMISSION LIMITATIONS

- D.4 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 keep free of visible dust. Speed limit signs shall be posted.
[Rule 62-296.320(4)(c), F.A.C.]

COMPLIANCE AND PERFORMANCE TESTING

- D.5 Test Notification: The owner or operator shall notify the Department Southwest District office (DEPSW) and the Hillsborough County Environmental Protection Commission (HCEPC) 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.
[Rule 62-297.310 and 40 CFR 60.8, F.A.C.]
- D.6 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 and 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 (DEPSW) and the Hillsborough County Environmental Protection Commission (HCEPC).
[Rule 62-297.310(7)(b), F.A.C.]
- D.7 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

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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.

[Rule 62-297.310(2) and (3), F.A.C.]

RECORD KEEPING AND REPORTING REQUIREMENTS

D.8 Emission Compliance Stack Test Reports:

- (a) A *test report* indicating the results of the required compliance tests shall be filed with the Department Southwest District office (DEPSW) and the Hillsborough County Environmental Protection Commission (HCEPC) as soon as practical, but no later than 45 days after the last sampling run is completed. [Rule 62-297.310(8), F.A.C., and 40 CFR 60.59(b)(1)]
- (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.

APPENDIX GC GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- G.1 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, or 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.
- G.2 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.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and 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.
- G.4 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.
- G.5 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 therefore; 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.
- G.6 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.7 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, access to the premises, where the permitted activity is located or conducted to:
- (a) Have access to and copy and records that must be kept under the conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.
- Reasonable time may depend on the nature of the concern being investigated.
- G.8 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:
- (a) A description of and cause of non-compliance; and
 - (b) 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.

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

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.

- G.9 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.
- G.10 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.
- G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code 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.
- G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13 This permit also constitutes:
- (a) Determination of Best Available Control Technology ()
 - (b) Determination of Prevention of Significant Deterioration (); and
 - (c) Compliance with New Source Performance Standards (X).
- G.14 The permittee shall comply with the following:
- (a) 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.
 - (b) 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.
 - (c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15 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.
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THE TAMPA TRIBUNE
Published Daily
Tampa, Hillsborough County, Florida

State of Florida)
County of Hillsborough) ss.

Before the undersigned authority personally appeared J. Rosenthal, who on oath says that she is Classified Billing Manager of The Tampa Tribune, a daily newspaper published at Tampa in Hillsborough County, Florida; that the attached copy of advertisement being a

LEGAL NOTICE

in the matter of _____

NOTICE OF APPLICATION

was published in said newspaper in the issues of _____

FEBRUARY 6, 1998

Affiant further says that the said The Tampa Tribune is a newspaper published at Tampa in said Hillsborough County, Florida, and that the said newspaper has heretofore been continuously published in said Hillsborough County, Florida, each day and has been entered as second class mail matter at the post office in Tampa, in said Hillsborough County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, this advertisement for publication in the said newspaper.

J. Rosenthal
9

Sworn to and subscribed before me, this _____ day
of _____ FEBRUARY _____, A.D. 1998

Personally Known _____ or Product Identification _____
Type of Identification Produced _____

(SEAL)

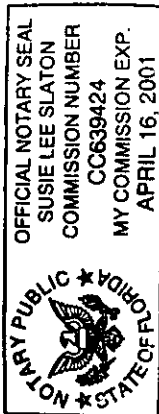
Susie Lee Slaton

PUBLIC NOTICE OF INTENT
TO ISSUE PERMIT
MODIFICATION
STATE OF FLORIDA
DEPARTMENT OF
ENVIRONMENTAL
PROTECTION
DRAFT Permit No.
PSD-FL-121(B)
Hillsborough County Resource
Recovery Facility
Hillsborough County
The Department of Environ-
mental Protection (Depart-
ment) gives notice of its intent
to issue a permit modification to
Hillsborough County to re-
place and improve the air pol-
lution control system; define
process throughout paramet-
ers; increase amount of
waste that can be burned on a
short-term basis, and specify
which materials can be
burned at its resource recov-
ery facility located at 350 Fal-
kenburg Road, Tampa, Hills-
borough County, Florida. It
was determined that an addi-
tional review for the Preven-
tion of Significant Deteriora-
tion (PSD) is not applicable
and a Best Available Control
Technology determination
was not required pursuant to
Rule 62-212.400 and 410,
F.A.C. The applicant's name
and address are: Hillsborough
County, 601 East Kennedy,
Tampa, Florida 33602.

The purpose of the project is
to comply with 40 CFR 60,
Subpart Cb - Emission Guide-
line and Compliance Times for
Municipal Waste Combustors
That Are Constructed on or
Before December 19, 1990.
The Emission Guideline was
developed pursuant to Section
129 (Solid Waste Combustion)
of the Clean Air Act as
amended in 1990. These re-
quirements are incorporated
in Department Rule 62-
204.800(8), F.A.C.

The facility consists of three
nominal 400 ton per day (TPD)
mass burn furnaces, water-
wall boilers, ash discharge
systems, air pollution control
equipment, and a single three-
stage steam turbine with a 29
megawatt electrical generat-
or. The proposed improve-
ments to the air pollution con-
trol system consist of replac-
ing the existing electrostatic
precipitators with lime spray
dryer absorbers and fabric fil-
ters. This will add acid gas
control for sulfur dioxide and
hydrogen chloride, improve
particulate (PM/PM 10) collec-
tion efficiency, and enhance
collection of heavy metals, in-
cluding lead and cadmium. An
activated carbon injection
system will be installed for
additional mercury control.
Nitrogen oxides will be con-
trolled by selective non-cataly-
tic reduction. Combustion
controls will be incorporated
to minimize formation of diox-
ins and furans, volatile organ-
ic compounds, and carbon
monoxide.

The original PSD permit
contained annual testing re-
quirements only for particu-
late matter. Specific limits and
testing requirements are pro-
posed for all previously men-
tioned pollutants. Continuous
emission monitors will be in-
stalled for sulfur dioxide, ni-
trogen oxides, oxygen, carbon



THE TAMPA TRIBUNE
Published Daily
Tampa, Hillsborough County, Florida

State of Florida)
 County of Hillsborough) ss.

Before the undersigned authority personally appeared J. Rosenthal, who on oath says that she is Classified Billing Manager of The Tampa Tribune, a daily newspaper published at Tampa in Hillsborough County, Florida; that the attached copy of advertisement being a

LEGAL NOTICE

in the matter of _____

NOTICE OF APPLICATION

was published in said newspaper in the issues of _____

FEBRUARY 6, 1998

Affiant further says that the said The Tampa Tribune is a newspaper published at Tampa in said Hillsborough County, Florida, and that the said newspaper has heretofore been continuously published in said Hillsborough County, Florida, each day and has been entered as second class mail matter at the post office in Tampa, in said Hillsborough County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, this advertisement for publication in the said newspaper.

J. Rosenthal

 9

Sworn to and subscribed before me, this _____ day
 of _____ FEBRUARY, A.D. 1998

Personally Known _____ or Product Identification _____
 Type of Identification Produced _____

(SEAL)

Lucie Lee Slater

PUBLIC NOTICE OF INTENT
 TO ISSUE PERMIT
 MODIFICATION
 STATE OF FLORIDA
 DEPARTMENT OF
 ENVIRONMENTAL
 PROTECTION
 DRAFT Permit No.
 PSD-FL-121(B)
 Hillsborough County Resource
 Recovery Facility
 Hillsborough County

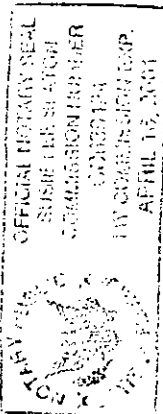
The Department of Environmental Protection (Department) gives notice of its intent to issue a permit modification to Hillsborough County to: replace and improve the air pollution control system; define process throughput parameters; increase amount of waste that can be burned on a short-term basis, and specify which materials can be burned at its resource recovery facility located at 350 Falkenburg Road, Tampa, Hillsborough County, Florida. It was determined that an additional review for the Prevention of Significant Deterioration (PSD) is not applicable and a Best Available Control Technology determination was not required pursuant to Rule 62-212.400, and 410., F.A.C. The applicant's name and address are: Hillsborough County, 601 East Kennedy, Tampa, Florida 33602.

The purpose of the project is to comply with 40 CFR 60, Subpart Cb - Emission Guideline and Compliance Times for Municipal Waste Combustors That Are Constructed on or Before December 19, 1995. The Emission Guideline was developed pursuant to Section 129 (Solid Waste Combustion) of the Clean Air Act as amended in 1990. These requirements are incorporated in Department Rule 62-204.800(8), F.A.C.

The facility consists of three nominal 400 ton per day (TPD) mass burn furnaces, water-wall boilers, ash discharge systems, air pollution control equipment, and a single three-stage steam turbine with a 29 megawatt electrical generator. The proposed improvements to the air pollution control system consist of replacing the existing electrostatic precipitators with lime spray dryer absorbers and fabric filters. This will add acid gas control for sulfur dioxide and hydrogen chloride, improve particulate (PM/PM 10) collection efficiency, and enhance collection of heavy metals, including lead and cadmium. An activated carbon injection system will be installed for additional mercury control. Nitrogen oxides will be controlled by selective non-catalytic reduction. Combustion controls will be incorporated to minimize formation of dioxins and furans, volatile organic compounds, and carbon monoxide.

The original PSD permit contained annual testing requirements only for particulate matter. Specific limits and testing requirements are proposed for all previously mentioned pollutants. Continuous emission monitors will be installed for sulfur dioxide, nitrogen oxides, oxygen, carbon

The units were originally permitted to utilize 'refuse such as garbage and trash' as defined in the Department's solid waste rules. The modified permit will specify the wastes as: solid waste including municipal solid waste (MSW) as defined at 40 CFR 60.51b and Section 403.706(5) F.S.; segregated wastes such as records and documents, non-hazardous contraband, clean wood and land clearing debris, packaging materials, clothing and fabric remnants and certain types of floor covering; segregated waste tires (not to exceed 3 percent of the total wastes received); other segregated wastes (not to exceed 5 percent of the total wastes received) such as construction and demolition debris, oil spill debris, expired or off-spec packaged or unpackaged consumable goods (e.g. pharmaceuticals), consume:



products, waste materials containing oil, used oil and filters and certain other wastes similar to MSW. The precise nature of the wastes is detailed in the draft permit package. By limiting the amount of segregated materials combusted at the facility, the Department has reasonable assurance that the overall composition of the wastes burned will be within the typical characteristics of MSW in terms of heating value, moisture, ash, and emissions characteristics.

Presently, the permitted waste throughput is 1200 TPD for the facility on an average annualized basis. The maximum allowable heat input rate is 165 mmBtu/hr at a daily waste throughput of 1,320 TPD (440 TPD per unit). The modified permit will, upon presentation of an engineering evaluation to the Department by the boiler manufacturer or operator, allow further increases of approximately 5 percent in short-term heat input, steam production, and waste throughput with no change in annual waste throughput limits.

The Department will issue the FINAL Permit Modification in accordance with the conditions of the DRAFT Permit Modification unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed DRAFT Permit Modification issuance action for a period of thirty (30) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection, if written comments received result in a significant change in this DRAFT Permit Modification, the Department shall issue a Revised DRAFT Permit Modification and require, if applicable, another Public Notice.

The Department will issue FINAL Permit Modification with the conditions of the DRAFT Permit Modification unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569

and 120.57 F.S. The procedures for petitioning for a hearing are set forth below. Mediation is not available for this action.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 904/488-9370, fax: 904/487-4938. Petitions must be filed within fourteen days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S. or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the Department's action or proposed action addressed in this notice of intent.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida, 32301
Telephone: 904/488-1344
Fax: 904/922-6979

Department of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

Hillsborough County Environmental
Protection Commission
1900 Ninth Avenue
Tampa, Florida 33605
Telephone: 813/272-5960
Fax: 813/272-5157

The complete project file includes the Draft Permit Modification, the application and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 904/488-1344, for additional information.

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2/6/98