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PINELLAS COUNTY, FLORIDA**

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March 23, 1999

Mr. Scott M. Sheplak, P.E., Administrator, Title V Section
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED

MAR 25 1999

BUREAU OF
AIR REGULATION

1030117-002-AV

Dear Mr. Sheplak:

Attached, please find four (4) copies of revisions to the Title V Permit Application for the Pinellas County Resource Recovery Facility (PCRRF). These revisions update the List of Applicable Regulations based on the Emissions Guidelines (EG) requirements for Municipal Waste Combustors (MWC) as discussed in our December 17, 1998 letter to Michael Rudd.

EG retrofits to MCW Unit 3, as well as some minor sources, have been completed and initial startup of retrofit Unit 3 began on September 24, 1998; therefore, this submittal also includes the necessary Title V revisions, which must be filed within 180 days of startup as required by FAC 62-213.420) for the completed EG modifications to the facility. Retrofits to MWC Units 2 and 1 will be completed in the next 18 months. If the final Title V permit is issued in that time period, the permit should specify the appropriate regulatory requirements for "existing" and "retrofit" MWC units not specific to any individual MWC unit (i.e., as was done in the PPSA Conditions of Certification). This will avoid having to modify the Title V permit after each unit is retrofitted.

This permit application contains revisions to the permit forms and attachments, which are designed to be either inserted into, or replace pages in the initial, Title V submittal. Based on discussions with Wendy Alexander, we have included a copy of all current air permits and PPSA Conditions of Certification as Attachment 19 for your use.

Since the Bridgeway Acres Landfill, also owned by Pinellas County, is contiguous to the PCRRF and has the same SIC code, they are considered to be the same facility for Title V purposes. Since the RRF and landfill are operated by different companies on behalf of Pinellas County, please separate the RRF and landfill requirements in the final Title V permit to the maximum extent possible.

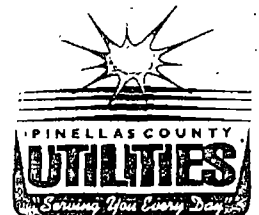
Thank you for your time and consideration. If you have any questions, please feel free to contact me, or Mr. Donald Elias of RTP Environmental Associates at (732) 968-9600.

Sincerely,
PINELLAS COUNTY UTILITIES

R. Peter Stasis, P.E., Director, Utilities Engineering

xc: Gary Robbins, PC DEM

Attachment 90G:\USERS\UTLEN27\WPDOC\S\STASIS\TITLE5A175



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MAR 25 1999

BUREAU OF
AIR REGULATION

**Department of
Environmental Protection**

**DIVISION OF AIR RESOURCES MANAGEMENT
APPLICATION FOR AIR PERMIT - LONG FORM**

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

This section of the Application for Air Permit form provides general information on the scope of this application, the purpose for which this application is being submitted, and the nature of any construction or modification activities proposed as a part of this application. This section also includes information on the owner or authorized representative of the facility (or the responsible official in the case of a Title V source) and the necessary statements for the applicant and professional engineer, where required, to sign and date for formal submittal of the Application for Air Permit to the Department. If the application form is submitted to the Department on diskette, this section of the Application for Air Permit must also be submitted in hard-copy.

Identification of Facility Addressed in This Application

Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility name, if any; and a brief reference to the facility's physical location. If known, also enter the ARMS or AIRS facility identification number. This information is intended to give a quick reference, on the first page of the application form, to the facility addressed in this application. Elsewhere in the form, numbered data fields are provided for entry of the facility data in computer-input format.

Applicant: Pinellas County Florida Board of County Commissioners

Facility: Pinellas County Resource Recovery Facility

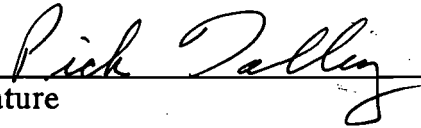
3095 114th Ave. North, St. Petersburg, Florida 33716

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

I. Part 1 - 1

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official: Mr. Pick Talley, Director of Utilities, Pinellas County
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Pinellas County Utilities Administration Street Address: 14 South Fort Harrison Avenue, 5th Floor City: Clearwater State: Florida Zip Code: 33756
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (727) 464-3438 Fax: (727) 464-3944
4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative* of the facility (non-Title V source) addressed in this Application for Air Permit or the responsible official, as defined in Chapter 62-213, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. Further, I agree to operate and maintain the air pollutant emissions units and air pollution control equipment described in this application so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. If the purpose of this application is to obtain an air operation permit or operation permit revision for one or more emissions units which have undergone construction or modification, I certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>  Signature _____ Date <u>3-23-99</u>

* Attach letter of authorization if not currently on file.

Scope of Application

This Application for Air Permit addresses the following emissions unit(s) at the facility (or Title V source). An Emissions Unit Information Section (a Section III of the form) must be included for each emissions unit listed.

<u>Emissions Unit ID</u>	<u>Description of Emissions Unit</u>
001	Mass Burn Incinerator Unit 1 (no revisions)
002	Mass Burn Incinerator Unit 2 (no revisions)
003	Mass Burn Incinerator Unit 3 (revised for EG retrofits)
004	Hydrated Lime Storage Silo - RRF Water Softening Area (no revisions)
005	Mulching Area Engine Generator (no revisions)
006	Metals Recovery System Wet Scrubber (no revisions)
007	Activated Carbon Storage Silo (new source)
008	Lime Storage Silo (new source)
009	Ash Conditioning Building Wet Scrubber (new source)

Purpose of Application and Category

Check one (except as otherwise indicated):

Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.

This Application for Air Permit is submitted to obtain:

- Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.
- Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: _____

- Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed: _____

- Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: _____ (see I. Part 7 - 1)

Operation permit to be revised: _____

- Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.

Operation permit to be revised/corrected: _____

- Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit to be revised: _____

Reason for revision: _____

Category II: All Air Operation Permit Applications Subject to Processing Under Rule 62-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain:

- Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s): _____

- Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed: _____

- Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g., to address one or more newly constructed or modified emissions units.

Operation permit to be revised: _____

Reason for revision: _____

Category III: All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain:

- Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any: _____

- Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s): _____

- Air construction permit for one or more existing, but unpermitted, emissions units.

Application Processing Fee

Check one:

Attached - Amount: \$ _____

Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations:

Facility improvements are being made to the Pinellas County Resource Recovery Facility (PCRRF) to comply with the EPA Emission Guidelines (40 CFR 60 Cb) and Florida mercury standards (Section 62-296.416, FAC). Construction permits were granted in an October 11, 1995 permit amendment to the PSD permits and modifications to the PPSA Conditions of Certification signed July 25, 1996 and May 19, 1998. The permitted improvements to the PCRRF air pollution control (APC) equipment consist of replacing the current electrostatic precipitator (ESPs) on each of the municipal waste combustors (MWC) with APC systems consisting of a spray dry absorber (SDA), a fabric filter (FF) baghouse, an activated carbon injection (ACI) system, and a selective non-catalytic reduction (SNCR) system. Also, combustion controller and furnace upgrades will also be installed. The permitted facility improvements include two outdoor storage silos (i.e., one each lime and carbon storage silos); auxiliary burners (used to heat the MWCs prior to introducing municipal solid waste [MSW] and as necessary during normal operations); and two wet scrubber systems to control particulate matter (PM) emissions from the metals recovery system and ash conditioning building.

Facility improvements and compliance testing for MWC unit #3, the lime and carbon storage silos, and ash handling system (metal recovery system and ash conditioning building) have been completed. Therefore, modifications to the initial Title V permit application are being submitted to reflect these improvements. Permit forms from the construction permit applications (May 1995 and August 1997) have been included herein for these new/modified sources, with any necessary revisions (e.g., page numbers reflecting the initial Title V application). These new permit forms are designed to be either inserted into or replace pages in the initial Title V application.

2. Projected or Actual Date of Commencement of Construction (DD-MON-YYYY):

--/06/1996

3. Projected Date of Completion of Construction (DD-MON-YYYY):

--/11/2000

I. Part 5 - 1

Professional Engineer Certification

1. Professional Engineer Name: **R. Peter Stasis**
Registration Number: **0046220**

2. Professional Engineer Mailing Address:

Organization/Firm: **Pinellas County Utilities Administration**
Street Address: **14 South Fort Harrison Avenue, 5th Floor**
City: **Clearwater** State: **Florida** Zip Code: **33756**

3. Professional Engineer Telephone Numbers:

Telephone: **(727) 464-3519** Fax: **(727) 464-3595**

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance (a) that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; or (b) for any application for a Title V source air operation permit, that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application;

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application; and

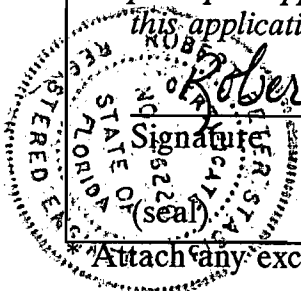
(3) For any application for an air construction permit for one or more proposed new or modified emissions units, the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

Robert Peter Stasis

Signature

3/23/99

Date



Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact: Donald F. Elias, Principal
2. Application Contact Mailing Address: Organization/Firm: RTP Environmental Associates, Inc. Street Address: 239 US Highway 22 East City: Green Brook State: NJ Zip Code: 08812
3. Application Contact Telephone Numbers: Telephone: (732) 968-9600 Fax: (732) 968-9603

Application Comment

The Pinellas County Resource Recovery Facility (PCRRF) is a Power Plant Siting Act (PPSA) facility. The first two Municipal Waste Combustors (MWC) were permitted as PPSA No. 78-11 while the third MWC was permitted as PPSA No. 83-18. The facility PSD Permit Nos. Are PSD-FL-011 and PSD-FL-098. Air quality requirements are contained in the current PPSA Conditions of Certification.

Since submittal of the initial Title V permit application, some permitted facility construction activities required for the Emission Guidelines (EG) have been completed, requiring this revision to the initial Title V permit application.

In addition to the MWCs, there is a small water softening plant with construction/operating permits for the lime storage silo AC52-259351/AO52-268853. Other minor sources (associated with the EG improvements) are described in I. Part 5 - 1. Since the Pinellas County municipal landfill is contiguous to the PCRRF, has the same SIC code (4953), and same owner (Pinellas County), it is considered to be the same facility for Title V purposes and must be included in the Title V application. Other solid waste operations include yard waste mulching. A trommel diesel engine, which does not have a permit and currently operates more than 400 hours/year, is included herein. Pinellas County is requesting the Department to process the application for this minor source also for a construction permit.

For further information, please see Section I, Part 5 - 1, Volume II of the May 1995 PPSA application, and the August 1997 construction permit/PPSA application.

C. FACILITY POLLUTANT INFORMATION

This subsection of the Application for Air Permit form allows for the reporting of potential and estimated emissions of selected pollutants on a facility-wide basis. It must be completed for each pollutant for which the applicant proposes to establish a facility-wide emissions cap and for each pollutant for which emissions are not reported at the emissions-unit level.

Facility Pollutant Information: Pollutant 1 of 1

1. Pollutant Emitted: VOC		
2. Estimated Emissions:	14.0	(tons/year)
3. Requested Emissions Cap:	(lb/hour)	(tons/year)
4. Basis for Emissions Cap Code:		
5. Facility Pollutant Comment: Current fugitive VOC emissions from Pinellas County landfill (not included in Section III-E) based on EG requirements - see Attachment 10.		

II. Part 5 - 1

Activated Carbon Storage Silo

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.

Type of Emissions Unit Addressed in This Section

Check one:

- [X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- [] This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
- [] This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions only.
- [] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

III. Part 1 - 7

Lime Storage Silo

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.

Type of Emissions Unit Addressed in This Section

Check one:

- This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
- This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions only.
- This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

III. Part 1 - 8

Ash Conditioning Building Wet Scrubber

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

This subsection of the Application for Air Permit form provides general information on the emissions unit addressed in this Emissions Unit Information Section, including information on the type, control equipment, operating capacity, and operating schedule of the emissions unit.

Type of Emissions Unit Addressed in This Section

Check one:

- [X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
- [] This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.
- [] This Emissions Unit Information Section addresses, as a single emissions unit, a collectively-regulated group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions only.
- [] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

III. Part 1 - 9

Emissions Unit Information Section 8 of 9

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section: Lime Storage Silo		
2. ARMS Identification Number: [<input checked="" type="checkbox"/>] No Corresponding ID [<input type="checkbox"/>] Unknown		
3. Emissions Unit Status Code: A	4. Acid Rain Unit? [<input type="checkbox"/>] Yes [<input checked="" type="checkbox"/>] No	5. Emissions Unit Major Group SIC Code: 49
6. Initial Startup Date (DD-MON-YYYY): 24-Sep-1998		
7. Long-term Reserve Shutdown Date (DD-MON-YYYY):		
8. Package Unit: Manufacturer: N/A Model Number: 510500 LIME		
9. Generator Nameplate Rating: MW		
10. Incinerator Information: Dwell Temperature: °F Dwell Time: seconds Incinerator Afterburner Temperature : °F		
11. Emissions Unit Comment: Installation of 70 ton capacity storage silo for storage of lime. Emissions will be controlled by dust collector. This source was included in the EG construction permits, for which a PSD permit amendment and modifications to PPSA Conditions of Certification were issued.		

Emissions Unit Information Section 9 of 9

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section: Ash Conditioning Building Wet Scrubber		
2. ARMS Identification Number: [<input checked="" type="checkbox"/>] No Corresponding ID [<input type="checkbox"/>] Unknown		
3. Emissions Unit Status Code: A	4. Acid Rain Unit? [<input type="checkbox"/>] Yes [<input checked="" type="checkbox"/>] No	5. Emissions Unit Major Group SIC Code: 49
6. Initial Startup Date (DD-MON-YYYY): 24-Sep-1998		
7. Long-term Reserve Shutdown Date (DD-MON-YYYY):		
8. Package Unit: Manufacturer: Tri-Mer Corporation Model Number: 50-H		
9. Generator Nameplate Rating:		MW
10. Incinerator Information: Dwell Temperature: °F Dwell Time: seconds Incinerator Afterburner Temperature : °F		
11. Emissions Unit Comment: Construction of an Ash Conditioning Building, including two 20-ton capacity flyash surge bins, to treat MWC flyash. Emissions from Ash Conditioning Building activities will be controlled by a high-energy wet venturi scrubber. This source was included in the revised EG construction permit, for which modifications to PPSA Conditions of Certification were issued.		

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

Emissions Unit Control Equipment

A.

1. Description: Spray Dryer Absorber
2. Control Device or Method Code: 067

B.

1. Description: Activated Carbon Injection
2. Control Device or Method Code: 048

C.

1. Description: Fabric Filter
2. Control Device or Method Code: 016

D.

1. Description: Modified Burner Design
2. Control Device or Method Code: 024

E.

1. Description: Selective Non-catalytic Reduction System
2. Control Device or Method Code: 081

III. Part 3 - 3

Emissions Unit Information Section 7 of 9

Activated Carbon Storage Silo

Emissions Unit Control Equipment

A.

1. Description: Dust Collector
2. Control Device or Method Code: 018

B.

1. Description:
2. Control Device or Method Code:

C.

1. Description:
2. Control Device or Method Code:

D.

1. Description:
2. Control Device or Method Code:

E.

1. Description:
2. Control Device or Method Code:

Emissions Unit Information Section 8 of 9

Lime Storage Silo

Emissions Unit Control Equipment

A.

1. Description: Dust Collector
2. Control Device or Method Code: 018

B.

1. Description:
2. Control Device or Method Code:

C.

1. Description:
2. Control Device or Method Code:

D.

1. Description:
2. Control Device or Method Code:

E.

1. Description:
2. Control Device or Method Code:

Emissions Unit Information Section 9 of 9

Ash Conditioning Building Wet Scrubber

Emissions Unit Control Equipment

A.

1. Description: Wet Scrubber
2. Control Device or Method Code: 001

B.

1. Description:
2. Control Device or Method Code:

C.

1. Description:
2. Control Device or Method Code:

D.

1. Description:
2. Control Device or Method Code:

E.

1. Description:
2. Control Device or Method Code:

Emissions Unit Information Section 7 of 9

Activated Carbon Storage Silo

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate: Not Applicable	mmbtu/hr
2. Maximum Incineration Rate: Not Applicable lb/hr	tons/day
3. Maximum Process or Throughput Rate: 40,000 lbs/hr charging rate (filling operations)	
4. Maximum Production Rate: Not Applicable	
5. Operating Capacity Comment: Dust collector required only for filling operations (about 20 hours/year)	

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:		
24 hours/day		7 days/week
52 weeks/year		8,760 hours/year

III. Parts 4 and 5 - 7

Emissions Unit Information Section 8 of 9

Lime Storage Silo

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate: Not Applicable	mmbtu/hr
2. Maximum Incineration Rate: Not Applicable lb/hr	tons/day
3. Maximum Process or Throughput Rate: 40,000 lbs/hr charging rate (filling operations)	
4. Maximum Production Rate: Not Applicable	
5. Operating Capacity Comment: Dust collector required only for filling operations (about 520 hours/year)	

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

III. Parts 4 and 5 - 8

Emissions Unit Information Section 9 of 9

Ash Conditioning Building Wet Scrubber

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate: Not Applicable	mmbtu/hr
2. Maximum Incineration Rate: Not Applicable lb/hr	tons/day
3. Maximum Process or Throughput Rate: 1000 tons/day flyash conveying rates	
4. Maximum Production Rate: Not Applicable	
5. Operating Capacity Comment:	

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:		
24 hours/day		7 days/week
52 weeks/year		8,760 hours/year

III. Parts 4 and 5 - 9

Emissions Unit Information Section 7 of 9

Activated Carbon Storage Silo

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.

Not Applicable (not required for Title V permit application).

III. Part 6a - 7

Lime Storage Silo

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.

Not Applicable (not required for Title V permit application).

Ash Conditioning Building Wet Scrubber

B. EMISSIONS UNIT REGULATIONS

Depending on the application category, this subsection of the Application for Air Permit form provides either a brief analysis or detailed listing of all federal, state, and local regulations applicable to the emissions unit addressed in this Emissions Unit Information Section.

Rule Applicability Analysis (Required for Category II applications and Category III applications involving non Title-V sources. See Instructions.

Not Applicable (not required for Title V permit application).

Emissions Unit Information Section 7 of 9

Activated Carbon Storage Silo

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

See Attachment 1 for Applicable Regulations	

III. Part 6b - 7

Emissions Unit Information Section 8 of 9

Lime Storage Silo

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

See Attachment 1 for Applicable Regulations	

III. Part 6b - 8

Emissions Unit Information Section 9 of 9

Ash Conditioning Building Wet Scrubber

List of Applicable Regulations (Required for Category I applications and Category III applications involving Title-V sources. See Instructions.)

See Attachment 1 for Applicable Regulations	

III. Part 6b - 9

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: Stack in Retrofit Site Plan	
2. Emission Point Type Code: <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit: Each MWC will have an independent air pollution control (APC) train.	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: MWCs units #1, #2, and #3 after the retrofits are complete will all exhaust to a common stack consisting of three separate flues.	
5. Discharge Type Code: <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input checked="" type="checkbox"/> V <input type="checkbox"/> W	
6. Stack Height:	165 feet
7. Exit Diameter:	8.5 feet
8. Exit Temperature:	270°F
9. Actual Volumetric Flow Rate:	243,117* acfm

III. Part 7 - 3a

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

10. Percent Water Vapor :	13.40* %
11. Maximum Dry Standard Flow Rate:	152,280 dscfm
12. Nonstack Emission Point Height:	N/A feet
13. Emission Point UTM Coordinates: Zone: 17 East (km): 335.25 North (km): 3084.10	
14. Emission Point Comment: * For worst-case emissions (i.e., maximum dscfm flowrates for conditions of 110% thermal load and 5,000 BTU/lb MSW). See May 1995 permit application for more details.	

III. Part 7 - 3b.

Emissions Unit Information Section 7 of 9

Activated Carbon Storage Silo

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: Activated Carbon Silo	
2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit: Not Applicable	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Not Applicable	
5. Discharge Type Code: <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input checked="" type="checkbox"/> V <input type="checkbox"/> W	
6. Stack Height:	43 feet
7. Exit Diameter:	0.7 feet
8. Exit Temperature:	77°F
9. Actual Volumetric Flow Rate:	1200 acfm

III. Part 7 - 7a

Emissions Unit Information Section 7 of 9

Activated Carbon Storage Silo

10. Percent Water Vapor :	N/A %
11. Maximum Dry Standard Flow Rate:	N/A dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates: Zone: 17 East (km): 335.25 North (km): 3084.10	
14. Emission Point Comment:	

III. Part 7 - 7b

Emissions Unit Information Section 8 of 9

Lime Storage Silo

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: Lime Storage Silo	
2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	
3. Descriptions of Emissions Points Comprising this Emissions Unit: Not Applicable	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Not Applicable	
5. Discharge Type Code: <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input checked="" type="checkbox"/> V <input type="checkbox"/> W	
6. Stack Height:	58 feet
7. Exit Diameter:	0.7 feet
8. Exit Temperature:	77°F
9. Actual Volumetric Flow Rate:	1200 acfm

III. Part 7 - 8a

Emissions Unit Information Section 8 of 9

Lime Storage Silo

10. Percent Water Vapor :	N/A %
11. Maximum Dry Standard Flow Rate:	N/A dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates: Zone: 17 East (km): 335.25 North (km): 3084.10	
14. Emission Point Comment:	

III. Part 7 - 8b

Emissions Unit Information Section 9 of 9

Ash Conditioning Building Wet Scrubber

C. EMISSION POINT (STACK/VENT) INFORMATION

This subsection of the Application for Air Permit form provides information about the emission point associated with the emissions unit addressed in this Emissions Unit Information Section. An emission point is typically a stack or vent but can be any identifiable location at which air pollutants, including fugitive emissions, are discharged into the atmosphere.

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: Wet Scrubber in Ash Conditioning Building
2. Emission Point Type Code: <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
3. Descriptions of Emissions Points Comprising this Emissions Unit: Not Applicable
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: Not Applicable
5. Discharge Type Code: <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/> H <input type="checkbox"/> P <input type="checkbox"/> R <input checked="" type="checkbox"/> V <input type="checkbox"/> W
6. Stack Height: 64.5 feet
7. Exit Diameter: 1.3 feet
8. Exit Temperature: 77°F
9. Actual Volumetric Flow Rate: ~5,000 acfm

III. Part 7 - 9a

Emissions Unit Information Section 9 of 9

Ash Conditioning Building Wet Scrubber

10. Percent Water Vapor :	Not Applicable %
11. Maximum Dry Standard Flow Rate:	5,000 dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates: Zone: 17 East (km): 335.25 North (km): 3084.10	
14. Emission Point Comment:	

III. Part 7 - 9b

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): Municipal Solid Waste (MSW) Incineration (emissions related to tons of MSW burned).	
2. Source Classification Code (SCC): 50300112	
3. SCC Units: Tons of MSW burned.	
4. Maximum Hourly Rate: 45.83 at 5000 BTU/lb HHV and 110% thermal load	5. Maximum Annual Rate: 401,500 at 5000 BTU/lb HHV and 110% thermal load
6. Estimated Annual Activity Factor: Not Applicable	
7. Maximum Percent Sulfur: Not Applicable	8. Maximum Percent Ash: Not Applicable
9. Million Btu per SCC Unit: 10 MMBTU/ton of MSW	
10. Segment Comment: Worst-case emissions are based on analysis of entire operating window. See Table 6-1 in May 1995 application.	

III. Part 8 - 3

Activated Carbon Storage Silo

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): General process (emissions related to tons processed)	
2. Source Classification Code (SCC): 50400201	
3. SCC Units: Tons processed	
4. Maximum Hourly Rate: 20	5. Maximum Annual Rate: 400
6. Estimated Annual Activity Factor: Not Applicable	
7. Maximum Percent Sulfur: Not Applicable	8. Maximum Percent Ash: Not Applicable
9. Million Btu per SCC Unit: Not Applicable	
10. Segment Comment: Maximum hourly rate is the greater of the material charge rate or discharge rate.	

Lime Storage Silo

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): General process (emissions related to tons processed)	
2. Source Classification Code (SCC): 50400201	
3. SCC Units: Tons processed.	
4. Maximum Hourly Rate: 20	5. Maximum Annual Rate: 10,400
6. Estimated Annual Activity Factor: Not Applicable	
7. Maximum Percent Sulfur: Not Applicable	8. Maximum Percent Ash: Not Applicable
9. Million Btu per SCC Unit: Not Applicable	
10. Segment Comment: Maximum hourly rate is the greater of the material charge rate or discharge rate.	

Emissions Unit Information Section 9 of 9

Ash Conditioning Building Wet Scrubber

D. SEGMENT (PROCESS/FUEL) INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of segment data (Fields 1-10) must be completed for each segment required to be reported and for each alternative operating method or mode (emissions trading scenario) under Chapter 62-213, F.A.C., for which the maximum hourly or annual segment-related rate would vary. A segment is a material handling, process, fuel burning, volatile organic liquid storage, production, or other such operation to which emissions of the unit are directly related. See instructions for further details on this subsection of the Application for Air Permit.

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode): General Process (emissions related to tons processed)	
2. Source Classification Code (SCC): 50400201	
3. SCC Units: Tons processed (flyash conveying rates)	
4. Maximum Hourly Rate: 41.7	5. Maximum Annual Rate: 365,000
6. Estimated Annual Activity Factor: Not Applicable	
7. Maximum Percent Sulfur: Not Applicable	8. Maximum Percent Ash: Not Applicable
9. Million Btu per SCC Unit: Not Applicable	
10. Segment Comment: Maximum hourly rate is the greater of the material charge rate or discharge rate.	

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 10

1. Pollutant Emitted: PM		
2. Total Percent Efficiency of Control:		99 %
3. Primary Control Device Code: 016		
4. Secondary Control Device Code: 067		
5. Potential Emissions:	14.4 lb/hour	63.1 tons/year
6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
8. Emission Factor: 0.012 gr/dscf @ 7% O₂ Reference: 40 CFR 60, Subpart Cb		
9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 5		
10. Calculation of Emissions: $0.012 \text{ gr/dscf @ } 7\% \text{ O}_2 \times 139,792 \text{ dscfm @ } 7\% \text{ O}_2 \times \frac{1 \text{ lb}}{7000 \text{ grains}} \times \frac{60 \text{ min}}{\text{hr}}$		
11. Pollutant Potential/Estimated Emissions Comment: See May 1995 Application		

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 2 of 10

1. Pollutant Emitted: PM₁₀		
2. Total Percent Efficiency of Control:	99 %	
3. Primary Control Device Code: 016		
4. Secondary Control Device Code: 067		
5. Potential Emissions:	14.4 lb/hour	63.1 tons/year
6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
8. Emission Factor: 0.012 gr/dscf @ 7% O₂ Reference: 40 CFR 60, Subpart Cb		
9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 5		
10. Calculation of Emissions: $0.012 \text{ gr/dscf @ } 7\% \text{ O}_2 \times 139,792 \text{ dscfm @ } 7\% \text{ O}_2 \times \frac{1 \text{ lb}}{7000 \text{ grains}} \times \frac{60 \text{ min}}{\text{hr}}$		
11. Pollutant Potential/Estimated Emissions Comment: See May 1995 Application		

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 3 of 10

1. Pollutant Emitted: CO		
2. Total Percent Efficiency of Control:		Not Applicable
3. Primary Control Device Code: 024		
4. Secondary Control Device Code: None		
5. Potential Emissions:	61.0 lb/hour	267.2 tons/year
6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
8. Emission Factor: 100 ppm_{dv} @ 7% O₂ Reference: 40 CFR 60, Subpart Cb		
9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 5		
10. Calculation of Emissions: $\frac{100 \text{ ppm}_{dv} @ 7\% \text{ O}_2}{1 \times 10^6} \times 139,792 \text{ dscfm} @ 7\% \text{ O}_2 \times \frac{28.01 \text{ lb}}{\text{mole}} \times \frac{0.002595 \text{ mole}}{\text{dscf}} \times \frac{60 \text{ min}}{\text{hr}}$		
11. Pollutant Potential/Estimated Emissions Comment: See May 1995 Application		

Mass Burn Incinerator Unit 3

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 4 of 10

1. Pollutant Emitted:	SO ₂		
2. Total Percent Efficiency of Control:	75%		
3. Primary Control Device Code:	067		
4. Secondary Control Device Code:	016		
5. Potential Emissions:	170.0 lb/hour	744.6 tons/year	
6. Synthetically Limited?	[] Yes [X] No		
7. Range of Estimated Fugitive/Other Emissions:	[] 1 [] 2 [] 3 _____ to _____ tons/year		
8. Emission Factor:	122 ppmdv @ 7% O ₂	(NTE limit for 75% control)	
	Reference: 40 CFR 60, Subpart Cb		
9. Emissions Method Code:	[] 1 [] 2 [] 3 [] 4 [X] 5		
10. Calculation of Emissions:	$\frac{122 \text{ ppmdv @ } 7\% \text{ O}_2}{1 \times 10^6} \times 139,792 \text{ dscfm @ } 7\% \text{ O}_2 \times \frac{64.07 \text{ lb}}{\text{mol}}$ $\times \frac{0.002595 \text{ mol}}{\text{dscf}} \times \frac{60 \text{ min}}{\text{hr}}$		
11. Pollutant Potential/Estimated Emissions Comment:	<p>Maximum potential emissions based on 75% control - not to exceed limit. See May 1995 Application.</p>		

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 5 of 10

1. Pollutant Emitted:	NO _x		
2. Total Percent Efficiency of Control:	~40%		
3. Primary Control Device Code:	081		
4. Secondary Control Device Code:	024		
5. Potential Emissions:	205.3 lb/hour	899.2 tons/year	
6. Synthetically Limited?	[] Yes [X] No		
7. Range of Estimated Fugitive/Other Emissions:	[] 1 [] 2 [] 3 _____ to _____ tons/year		
8. Emission Factor:	205 ppmdv @ 7% O ₂ Reference: 40 CFR 60, Subpart B		
9. Emissions Method Code:	[] 1	[] 2	[] 3 [] 4 [X] 5
10. Calculation of Emissions:	$\frac{205 \text{ ppmdv @ 7\% O}_2}{1 \times 10^6} \times 139,792 \text{ dscfm @ 7\% O}_2 \times \frac{46.01 \text{ lb}}{\text{mol}}$ $\times \frac{0.002595 \text{ mol}}{\text{dscf}} \times \frac{60 \text{ min}}{\text{hr}}$		
11. Pollutant Potential/Estimated Emissions Comment:	See August 1997 Application.		

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 7 of 10

1. Pollutant Emitted: H027 (Cadmium)		
2. Total Percent Efficiency of Control:		99.7%
3. Primary Control Device Code: 016		
4. Secondary Control Device Code: 067		
5. Potential Emissions:	0.021 lb/hour	0.092 tons/year
6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
8. Emission Factor: 40 µg/dscm @ 7% O₂ Reference: 40 CFR 60, Subpart Cb		
9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 5		
10. Calculation of Emissions: $40 \text{ ug/dscm @ 7\% O}_2 \times \left(\frac{3958.5 \text{ dscm @ 7\% O}_2}{\text{min}} \right) \left(\frac{2.205 \times 10^{-9} \text{ lb}}{\text{ug}} \right) \left(\frac{60 \text{ min}}{\text{hr}} \right)$		
11. Pollutant Potential/Estimated Emissions Comment: See May 1995 Application.		

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 8 of 10

1. Pollutant Emitted: H110 (Lead)		
2. Total Percent Efficiency of Control:		99.8%
3. Primary Control Device Code: 016		
4. Secondary Control Device Code: 067		
5. Potential Emissions:	0.257 lb/hour	1.13 tons/year
6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
8. Emission Factor: 490 µg/dscm @ 7% O₂ Reference: 40 CFR 60, Subpart Cb		
9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 5		
10. Calculation of Emissions: $490 \text{ ug/dscm @ 7\% O}_2 \times \frac{3958.5 \text{ dscm}}{\text{min}} \text{ @ 7\% O}_2 \times \frac{2.205 \times 10^{-9} \text{ lb}}{\text{ug}} \times \frac{60 \text{ min}}{\text{hr}}$		
11. Pollutant Potential/Estimated Emissions Comment: See May 1995 Application.		

III. Part 9a - 19a

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 9 of 10

1. Pollutant Emitted: H114 (Mercury)	
2. Total Percent Efficiency of Control:	85%
3. Primary Control Device Code: 048	
4. Secondary Control Device Code: 016/067	
5. Potential Emissions:	5.24x10⁻² lb/hour 0.23 tons/year
6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year	
8. Emission Factor: 100 µg/dscm @ 7% O₂ (NTE limit for 85% control) Reference: 40 CFR 60, Subpart Cb and FAC 62-296.416	
9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 5	
10. Calculation of Emissions: $100 \text{ ug/dscm @ 7\% O}_2 \times \frac{3958.5 \text{ dscm}}{\text{min}} \text{ @ 7\% O}_2 \times \frac{2.205 \times 10^{-9} \text{ lb}}{\text{ug}} \times \frac{60 \text{ min}}{\text{hr}}$	
11. Pollutant Potential/Estimated Emissions Comment: Maximum potential emissions based on 85% control - not to exceed limit. See May 1995 Application.	

III. Part 9a - 19b

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 10 of 10

1. Pollutant Emitted: Diox	
2. Total Percent Efficiency of Control:	96%
3. Primary Control Device Code: 024	
4. Secondary Control Device Code: 016/067	
5. Potential Emissions:	1.6 x 10⁻⁵ lb/hour 6.9 x 10⁻⁵ tons/year
6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year	
8. Emission Factor: 30 ng/dscm @ 7% O₂ total dioxins/furans Reference: 40 CFR 60, Subpart Cb	
9. Emissions Method Code: <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
10. Calculation of Emissions: $30 \text{ ng/dscm @ 7\% O}_2 \times \frac{3958.5 \text{ dscm}}{\text{min}} \text{ @ 7\% O}_2 \times \frac{2.205 \times 10^{-12} \text{ lb}}{\text{ng}} \times \frac{60 \text{ min}}{\text{hr}}$	
11. Pollutant Potential/Estimated Emissions Comment: See May 1995 Application.	

III. Part 9a - 19c

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 6 of 10

1. Pollutant Emitted: HCl	
2. Total Percent Efficiency of Control:	95%
3. Primary Control Device Code: 067	
4. Secondary Control Device Code: 016	
5. Potential Emissions:	79.8 lb/hour 349.5 tons/year
6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year	
8. Emission Factor: 100 ppmdv @ 7% O₂ (NTE limit for 95% control) Reference: 40 CFR 60, Subpart Cb	
9. Emissions Method Code: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 5	
10. Calculation of Emissions: $\frac{100 \text{ ppmdv @ } 7\% \text{ O}_2}{1 \times 10^6} \times 139,792 \text{ dscfm @ } 7\% \text{ O}_2 \times \frac{36.47 \text{ lb}}{\text{mol}}$ $\times \frac{0.002595 \text{ mol}}{\text{dscf}} \times \frac{60 \text{ min}}{\text{hr}}$	
11. Pollutant Potential/Estimated Emissions Comment: Maximum potential emissions based on 95% control - not to exceed limit. See May 1995 Application.	

Emissions Unit Information Section 7 of 9

Activated Carbon Storage Silo

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 1

1. Pollutant Emitted: PM/PM₁₀		
2. Total Percent Efficiency of Control:		99 %
3. Primary Control Device Code: 018		
4. Secondary Control Device Code:		
5. Potential Emissions:		0.051 lb/hour 0.22 tons/year
6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year		
8. Emission Factor: 0.005 grains/scf Reference: Vendor Data and Engineering Estimates		
9. Emissions Method Code: <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5		
10. Calculation of Emissions: $\frac{0.005 \text{ gr}}{\text{scf}} \times \frac{1200 \text{ scf}}{\text{min}} \times \frac{1 \text{ lb}}{7000 \text{ grains}} \times \frac{60 \text{ min}}{\text{hr}}$		
11. Pollutant Potential/Estimated Emissions Comment: See May 1995 Application.		

Emissions Unit Information Section 8 of 9

Lime Storage Silo

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 1

1. Pollutant Emitted: PM/PM₁₀	
2. Total Percent Efficiency of Control:	99 %
3. Primary Control Device Code: 018	
4. Secondary Control Device Code:	
5. Potential Emissions:	0.051 lb/hour 0.22 tons/year
6. Synthetically Limited? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
7. Range of Estimated Fugitive/Other Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year	
8. Emission Factor: 0.005 grains/scf Reference: Vendor Data and Engineering Estimates	
9. Emissions Method Code: <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5	
10. Calculation of Emissions: $\frac{0.005 \text{ gr}}{\text{scf}} \times \frac{1200 \text{ scfm}}{\text{min}} \times \frac{1 \text{ lb}}{7000 \text{ grains}} \times \frac{60 \text{ min}}{\text{hr}}$	
11. Pollutant Potential/Estimated Emissions Comment: See May 1995 Application.	

Emissions Unit Information Section 9 of 9

Ash Conditioning Building Wet Scrubber

E. POLLUTANT INFORMATION

For the emissions unit addressed in this Emissions Unit Information Section, a separate set of pollutant information must be completed for each pollutant required to be reported. See instructions for further details on this subsection of the Application for Air Permit.

Pollutant Potential/Estimated Emissions: Pollutant 1 of 1

1. Pollutant Emitted:	PM/PM ₁₀	
2. Total Percent Efficiency of Control:	98 %	
3. Primary Control Device Code:	001	
4. Secondary Control Device Code:		
5. Potential Emissions:	1.3 lb/hour	5.7 tons/year
6. Synthetically Limited?	[] Yes [X] No	
7. Range of Estimated Fugitive/Other Emissions:	[] 1 [] 2 [] 3 _____ to _____ tons/year	
8. Emission Factor:	0.03 grains/dscf Reference: Engineering Estimate (FAC 62-296.711(2)(b))	
9. Emissions Method Code:	[] 1 [] 2 [] 3 [] 4 [X] 5	
10. Calculation of Emissions:	$\frac{0.03 \text{ grains}}{\text{dscf}} \times \frac{5000 \text{ dscf}}{\text{minute}} \times \frac{1 \text{ lb}}{7000 \text{ grains}} \times \frac{60 \text{ minutes}}{\text{hour}} = \frac{1.3 \text{ lb}}{\text{hour}}$	
11. Pollutant Potential/Estimated Emissions Comment:	See August 1997 Application.	

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

Allowable Emissions (PM on page III. Part 9a - 13)

A.

1. Basis for Allowable Emissions Code: Rule
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.012 gr/dscf @ 7% O₂
4. Equivalent Allowable Emissions: 14.4 lb/hour 63.1 tons/year
5. Method of Compliance: USEPA Method 5 [as per 40 CFR 60.58(c)]
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): Basis for Allowable Emissions = 40 CFR 60, Subpart Cb

B.

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions: lb/hr tons/year
5. Method of Compliance:
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):

III. Part 9b - 5

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

Allowable Emissions (PM₁₀ on page III. Part 9a - 14)

A.

1. Basis for Allowable Emissions Code: Rule
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 0.012 gr/dscf @ 7% O₂
4. Equivalent Allowable Emissions: 14.4 lb/hour 63.1 tons/year
5. Method of Compliance: USEPA Method 5 [as per 40 CFR 60.58(c)]
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): Basis for Allowable Emissions = 40 CFR 60, Subpart Cb

B.

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions: lb/hr tons/year
5. Method of Compliance:
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):

III. Part 9b - 6

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

Allowable Emissions (CO on page III. Part 9a - 15)

A.

1. Basis for Allowable Emissions Code: Rule		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: 100 ppm_{dv} @ 7% O₂ (4-hr arithmetic average)		
4. Equivalent Allowable Emissions:	61.0 lb/hour	267.2 tons/year
5. Method of Compliance: CEM [as per 40 CFR 60.58(c)]		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): Basis for Allowable Emissions = 40 CFR 60, Subpart Cb		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

III. Part 9b - 7

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

Allowable Emissions (SO₂ on page III. Part 9a - 16)

A.

1. Basis for Allowable Emissions Code: Rule		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: 31 ppmdv@7% O₂ or 75% control (24-hr geometric mean of 1-hr arithmetic avgs), not to exceed 122 ppmdv@7% O₂.		
4. Equivalent Allowable Emissions:	170.0 lb/hour	744.6 tons/year
5. Method of Compliance: CEM [as per 40 CFR 60.58b(e)].		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): Basis for Allowable Emissions = 40 CFR 60, Subpart Cb (75% control)		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

III. Part 9b - 8

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

Allowable Emissions (NO_x on page III. Part 9a - 17)

A.

1. Basis for Allowable Emissions Code: Rule		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: 205 ppm _{dv} @ 7% O ₂		
4. Equivalent Allowable Emissions:	205.3 lb/hour	899.2 tons/year
5. Method of Compliance: CEM [as per 40 CFR 60.58b(h)].		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): Basis for Allowable Emissions = 40 CFR 60, Subpart Cb		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

III. Part 9b - 9a

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

Allowable Emissions (H027 [Cadmium] on page III. Part 9a - 18)

A.

1. Basis for Allowable Emissions Code: Rule
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 40 $\mu\text{g}/\text{dscm}$ @ 7% O_2
4. Equivalent Allowable Emissions: 0.021 lb/hour 0.092 tons/year
5. Method of Compliance: USEPA Method 29 [as per 40 CFR 60.58b(d)].
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): Basis for Allowable Emissions = 40 CFR 60, Subpart Cb

B.

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions: lb/hr tons/year
5. Method of Compliance:
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):

III. Part 9b - 9b

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

Allowable Emissions (H110 [Lead] on page III. Part 9a - 19a)

A.

1. Basis for Allowable Emissions Code: Rule
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 490 μg/dscm @ 7% O₂
4. Equivalent Allowable Emissions: 0.257 lb/hour 1.13 tons/year
5. Method of Compliance: USEPA Method 29 [as per 40 CFR 60.58b(d)].
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): Basis for Allowable Emissions = 40 CFR 60, Subpart Cb

B.

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions: lb/hr tons/year
5. Method of Compliance:
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):

III. Part 9b - 9c

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

Allowable Emissions (H114 [Mercury] on page III. Part 9a - 19b)

A.

1. Basis for Allowable Emissions Code: Rule
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 70 $\mu\text{g}/\text{dscm}$ @ 7% O₂ or 85% control, not to exceed 100 $\mu\text{g}/\text{dscm}$ at 7% O₂.
4. Equivalent Allowable Emissions: 5.24x10⁻² lb/hour 0.23 tons/year
5. Method of Compliance: USEPA Method 29 [as per 40 CFR 60.58b(d)].
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): Basis for Allowable Emissions = 40 CFR 60, Subpart Cb and FAC 62-296.416 (85% control)

B.

1. Basis for Allowable Emissions Code:
2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:
4. Equivalent Allowable Emissions: lb/hr tons/year
5. Method of Compliance:
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):

III. Part 9b - 9d

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

Allowable Emissions (Dioxin on page III. Part 9a - 19c)

A.

1. Basis for Allowable Emissions Code: Rule		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: 30 ng/dscm @ 7% O₂ (Total)		
4. Equivalent Allowable Emissions:	1.6 x 10⁻⁵ lb/hour	6.9 x 10⁻⁵ tons/year
5. Method of Compliance: USEPA Method 23 [as per 40 CFR 60.58b(g)]		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): Basis for Allowable Emissions = 40 CFR 60, Subpart Cb		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

III. Part 9b - 9e

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

Allowable Emissions (HCl on page III. Part 9a - 29)

A.

1. Basis for Allowable Emissions Code: Rule		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units: 31 ppmdv @ 7% O₂ or 95% control, not to exceed 100 ppmdv at 7% O₂.		
4. Equivalent Allowable Emissions:	79.8 lb/hour	349.5 tons/year
5. Method of Compliance: USEPA Method 26 or 26A [as per 40 CFR 60.58b(f)].		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode): Basis for Allowable Emissions = 40 CFR 60, Subpart Cb (95% control)		

B.

1. Basis for Allowable Emissions Code:		
2. Future Effective Date of Allowable Emissions:		
3. Requested Allowable Emissions and Units:		
4. Equivalent Allowable Emissions:	lb/hr	tons/year
5. Method of Compliance:		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):		

III. Part 9b - 12

Mass Burn Incinerator Unit 3

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 2

1. Visible Emissions Subtype: VE (for MWC Stack)	
2. Basis for Allowable Opacity:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity:	Normal Conditions: 10 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour
4. Method of Compliance: USEPA Method 9 and CEM, [as per 40 CFR 60.58b(c)].	
5. Visible Emissions Comment: EG limitation for stack emissions.	

Mass Burn Incinerator Unit 3

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 2 of 2

1. Visible Emissions Subtype: VE (for Ash Handling Sources/Fugitive Emissions)
2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: Any % Maximum Period of Excess Opacity Allowed: 3 min/hour
4. Method of Compliance: USEPA Method 22 [as per 40 CFR 60.55b].
5. Visible Emissions Comment: EG limitation for MWC fugitive ash emissions which apply to ash conveying systems (including transfer points). Does not apply: (1) during periods of maintenance or repair of ash conveying systems or (2) to emissions discharged inside buildings (does cover visible ash emissions discharged to the atmosphere from buildings or enclosures).

Emissions Unit Information Section 6 of 9

Metals Recovery System Wet Scrubber

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE
2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: N/A min/hour
4. Method of Compliance: Initial Method 9 Test
5. Visible Emissions Comment: Pursuant to FAC 62-297.620(4), PPSA Conditions of Certification require a Method 9 test showing no visible emissions (i.e., an alternate standard of 5% opacity) in lieu of performing a particulate stack test for this source demonstrating compliance with the primary (gr/dscf) standard.

Activated Carbon Storage Silo

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE
2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: N/A min/hour
4. Method of Compliance: Initial Method 9 Test
5. Visible Emissions Comment: Pursuant to FAC 62-297.620(4), PPSA Conditions of Certification require a Method 9 test showing no visible emissions (i.e., an alternate standard of 5% opacity) in lieu of performing a particulate stack test for this source demonstrating compliance with the primary (gr/dscf) standard.

Lime Storage Silo

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE
2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: N/A min/hour
4. Method of Compliance: Initial Method 9 Test
5. Visible Emissions Comment: Pursuant to FAC 62-297.620(4), PPSA Conditions of Certification require a Method 9 test showing no visible emissions (i.e., an alternate standard of 5% opacity) in lieu of performing a particulate stack test for this source demonstrating compliance with the primary (gr/dscf) standard.

Emissions Unit Information Section 9 of 9

Ash Conditioning Building Wet Scrubber

F. VISIBLE EMISSIONS INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are subject to a visible emissions limitation. The intent of this subsection of the form is to identify each activity associated with the emissions unit addressed in this section for which a separate opacity limitation would be applicable. Visible emission subtype codes for each such activity are listed in the instructions for Field 1. Most emissions units will be subject to a "subtype VE" limit only.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE
2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: N/A min/hour
4. Method of Compliance: Initial Method 9 Test
5. Visible Emissions Comment: Pursuant to FAC 62-297.620(4), PPSA Conditions of Certification require a Method 9 test showing no visible emissions (i.e., an alternate standard of 5% opacity) in lieu of performing a particulate stack test for this source demonstrating compliance with the primary (gr/dscf) standard.

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required

Continuous Monitoring System: Continuous Monitor 1 of 7

1. Parameter Code: VE
2. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Monitor Information: Manufacturer: Land Combustion Model Number: 4500 MK II Serial Number: 4500 9795152, LCU 9797059
4. Installation Date (DD-MON-YYYY): Prior to 08-Nov-1998
5. Performance Specification Test Date (DD-MON-YYYY): 30-Apr-1997 (Factory)
6. Continuous Monitor Comment: CMS Required Under 40 CFR 60.58b

Continuous Monitoring System: Continuous Monitor 2 of 7

1. Parameter Code: CO, S02 (SDA Inlet)
2. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Monitor Information: Manufacturer: Perkin Elmer Infrared Multi-Gas Analyzer Model Number: MCS-100 Serial Number: 1494
4. Installation Date (DD-MON-YYYY): Prior to 16-Nov-1998
5. Performance Specification Test Date (DD-MON-YYYY): 02-Dec-1998
6. Continuous Monitor Comment: CMS Required Under 40 CFR 60.58b

III. Part 11 - 2

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required

Continuous Monitoring System: Continuous Monitor 3 of 7

1. Parameter Code: NOx, SO2 (FF Outlet)
2. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Monitor Information: Manufacturer: Perkin Elmer Infrared Multi-Gas Analyzer Model Number: MCS-100 Serial Number: 1519
4. Installation Date (DD-MON-YYYY): Prior to 16-Nov-1998
5. Performance Specification Test Date (DD-MON-YYYY): 02-Dec-1998
6. Continuous Monitor Comment: CMS Required Under 40 CFR 60.58b

Continuous Monitoring System: Continuous Monitor 4 of 7

1. Parameter Code: 02 (SDA Inlet)
2. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Monitor Information: Manufacturer: Ametek Model Number: Ametek 2000 Serial Number: C153885-2
4. Installation Date (DD-MON-YYYY): Prior to 02-Dec-1998
5. Performance Specification Test Date (DD-MON-YYYY): 02-Dec-1998
6. Continuous Monitor Comment: CMS Required Under 40 CFR 60.58b

III. Part 11 - 3

Emissions Unit Information Section 3 of 9

Mass Burn Incinerator Unit 3

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required

Continuous Monitoring System: Continuous Monitor 5 of 7

1. Parameter Code: 02 (FF Outlet)
2. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Monitor Information: Manufacturer: Ametek Model Number: Ametek 2000 Serial Number: C153885-3
4. Installation Date (DD-MON-YYYY): Prior to 02-Dec-1998
5. Performance Specification Test Date (DD-MON-YYYY): 02-Dec-1998
6. Continuous Monitor Comment: CMS Required Under 40 CFR 60.58b

Continuous Monitoring System: Continuous Monitor 6 of 7

1. Parameter Code: Temperature (FF Inlet)
2. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Monitor Information: Manufacturer: Rosemount Model Number: Type K thermocouple Serial Number: N/A
4. Installation Date (DD-MON-YYYY): N/A
5. Performance Specification Test Date (DD-MON-YYYY): N/A
6. Continuous Monitor Comment: Required Under 40 CFR 60.58b

III. Part 11 - 4

Mass Burn Incinerator Unit 3

G. CONTINUOUS MONITOR INFORMATION

This subsection of the Application for Air Permit form must be completed for only those emissions units which are required by rule or permit to install and operate one or more continuous emission, opacity, flow, or other type monitors. A separate set of continuous monitor information (Fields 1-6) must be completed for each monitoring system required

Continuous Monitoring System: Continuous Monitor 7 of 7

1. Parameter Code: Steam Load
2. CMS Requirement: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Monitor Information: Manufacturer: Rosemount Model Number: Rosemount 1151 DP Serial Number: N/A
4. Installation Date (DD-MON-YYYY): N/A
5. Performance Specification Test Date (DD-MON-YYYY): N/A
6. Continuous Monitor Comment: Required Under 40 CFR 60.58b

Activated Carbon Storage Silo

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

-] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
-] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
-] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
-] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
-] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Lime Storage Silo

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

-] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
-] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
-] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
-] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
-] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

III. Part 12 - 15

Lime Storage Silo

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

-] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
-] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
-] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
-] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
-] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:						
PM	<input checked="" type="checkbox"/>	C	<input type="checkbox"/>	E	<input type="checkbox"/>	Unknown
SO2	<input type="checkbox"/>	C	<input type="checkbox"/>	E	<input type="checkbox"/>	Unknown
NO2	<input type="checkbox"/>	C	<input type="checkbox"/>	E	<input type="checkbox"/>	Unknown
4. Baseline Emissions:						
PM	0.0		lb/hour	0.0		tons/year
SO2			lb/hour			tons/year
NO2						tons/year
5. PSD Comment: Source has particulate emissions only.						

Ash Conditioning Building Wet Scrubber

H. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

This subsection of the Application for Air Permit form must be completed for all applications, not just those undergoing prevention-of-significant-deterioration (PSD) review pursuant to Rule 62-212.400, F.A.C. The intent of this subsection is to make a preliminary determination as to whether the emissions unit addressed in this Emissions Unit Information Section consumes PSD increment. PSD increment is consumed (or expanded) as a result of emission increases (decreases) occurring after pollutant-specific baseline dates. Pollutants for which baseline dates have been established are sulfur dioxide, particulate matter, and nitrogen dioxide.

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

If the emissions unit addressed in this section emits particulate matter or sulfur dioxide, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for particulate matter or sulfur dioxide. Check the first statement, if any, that applies and skip remaining statements.

-] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
-] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
-] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
-] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
-] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

Ash Conditioning Building Wet Scrubber

2. Increment Consuming for Nitrogen Dioxide?

If the emissions unit addressed in this section emits nitrogen oxides, answer the following series of questions to make a preliminary determination as to whether or not the emissions unit consumes PSD increment for nitrogen dioxide. Check first statement, if any, that applies and skip remaining statements.

-] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.
-] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
-] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
-] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
-] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code:					
PM	<input checked="" type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown		
SO2	<input type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown		
NO2	<input type="checkbox"/> C	<input type="checkbox"/> E	<input type="checkbox"/> Unknown		
4. Baseline Emissions:					
PM	0.0	lb/hour	0.0	tons/year	
SO2		lb/hour		tons/year	
NO2				tons/year	
5. PSD Comment: Source has particulate emissions only.					

Activated Carbon Storage Silo

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

<p>1. Process Flow Diagram <input type="checkbox"/> Attached, Document ID: _____ [X] Not Applicable <input type="checkbox"/> Waiver Requested see May 1995 Application</p>
<p>2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ [X] Not Applicable <input type="checkbox"/> Waiver Requested</p>
<p>3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ [X] Not Applicable <input type="checkbox"/> Waiver Requested see May 1995 Application</p>
<p>4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ [X] Not Applicable <input type="checkbox"/> Waiver Requested</p>
<p>5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable</p>
<p>6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ [X] Not Applicable</p>
<p>7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ [X] Not Applicable</p>
<p>8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ [X] Not Applicable</p>
<p>9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ [X] Not Applicable</p>

Emissions Unit Information Section 7 of 9

Activated Carbon Storage Silo

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Enhanced Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Identification of Additional Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: <u>Attachment 1</u> <input type="checkbox"/> Not Applicable
14. Acid Rain Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

Lime Storage Silo

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

1. Process Flow Diagram <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested see May 1995 Application
2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested see May 1995 Application
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

Emissions Unit Information Section 8 of 9

Lime Storage Silo

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Enhanced Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Identification of Additional Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: <u>Attachment 1</u> <input type="checkbox"/> Not Applicable
14. Acid Rain Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

Emissions Unit Information Section 9 of 9

Ash Conditioning Building Wet Scrubber

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

This subsection of the Application for Air Permit form provides supplemental information related to the emissions unit addressed in this Emissions Unit Information Section. Supplemental information must be submitted as an attachment to each copy of the form, in hard-copy or computer-readable form.

Supplemental Requirements for All Applications

1. Process Flow Diagram <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested see August 1997 Application
2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested see August 1997 Application
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

III. Part 13 - 17

Emissions Unit Information Section 9 of 9

Ash Conditioning Building Wet Scrubber

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Enhanced Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Identification of Additional Applicable Requirements <input checked="" type="checkbox"/> Attached, Document ID: <u>Attachment 1</u> <input type="checkbox"/> Not Applicable
14. Acid Rain Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

**LIST OF APPLICABLE REGULATIONS
PINELLAS COUNTY RESOURCE RECOVERY FACILITY
REVISED TITLE V OPERATION PERMIT APPLICATION**

Facility Applicable Regulations:

Entire Florida Title V "Core List" regulations (3/25/96) applicable to the facility (major section headings listed). Additional requirements applicable to the facility are also listed below. Requirements for specific emission units are given after.

40 CFR 61/Subpart M	NESHAP/NESHAP for Asbestos (Core List)
40 CFR 68	Chemical Accident Prevention Provisions
40 CFR 82/Subparts B/F	Protection of Stratospheric Ozone (Core List)
FAC 62-4	Permits (Core List)
FAC 62-103	Rules of Administrative Procedure (Core List)
FAC 62-210	Stat. Sources-General Requirements (Core List plus list below)
FAC 62-210.300(3)(a)5	Exemption for internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight (earth moving equipment and solid waste delivery vehicles at resource recovery facility and landfill areas)
FAC 62-210.300(3)(a)16	Exemption for brazing, soldering or welding equipment
FAC 62-210.300(3)(a)20	Exemption for emergency electrical generators, heating units, and
- (3)(a)21	and general purpose internal combustion engines not subject to Acid Rain Program
FAC 62-210.300(3)(b)	Temporary Exemptions (for mulching area diesel engine)
FAC 62-213	Operating Permits for Major Sources of Air Pollution (Core List)
FAC 62-256	Open Burning and Frost Protection Fires (Core List)
FAC 62-257	Asbestos Notification and Fee (Core List)
FAC 62-281	Motor Vehicle A/C Refrigerant Recovery/Recycling (Core List)
FAC 62-296	Stationary Sources-Emission Standards (Core List plus list below)
FAC 62-296.416(3)(e)	Specific Emission Limiting and Performance Standards - Mercury Emissions Inventory (Testing Requirements)^a

EXEMPTIONS from Applicable Facility/Emission Units Regulations:

40 CFR 60 Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units^b
40 CFR 60 Subpart Ea	Standards of Performance for MWCs - NOT APPLICABLE^c
40 CFR 60 Subpart Eb	Standards of Performance for Large MWCs - NOT APPLICABLE^c
40 CFR 64	Compliance Assurance Monitoring^d

^aAcid gas controls are being added as part of the EG retrofits so the mercury limits will not apply to each MWC unit until retrofitted with a scrubber (FAC 62-296.416(3)(a)2). At present, only unit #3 has been retrofit for the EGs.

^bThe NSPS in Subpart Db does not apply since the units were constructed prior to June 19, 1984.

^cThe NSPS in Subparts Ea and Eb do not apply since the units were constructed prior to December 20, 1989 and any modifications made primarily to comply with the EGs do not trigger NSPS (40 CFR 60.50a(f) and 60.50b(d)).

^dCAM is not applicable to MWC emission limitations or standards pursuant to 40 CFR 64.2(b)(1) since NSPS (Section 111) Subpart Eb monitoring requirements (proposed after November 15, 1990) are specified by the Emissions Guidelines.

**LIST OF APPLICABLE REGULATIONS
PINELLAS COUNTY RESOURCE RECOVERY FACILITY
REVISED TITLE V OPERATION PERMIT APPLICATION
(Continued)**

EXEMPTIONS from Applicable Facility/Emission Units Regulations: (Concluded)

FAC 62-296.320(4)(a)	Particulate Emission Limiting Standards - NOT APPLICABLE ^e
FAC 62-296.500	VOC/NO _x RACT - NOT APPLICABLE ^f
FAC 62-296.600	Lead RACT - NOT APPLICABLE ^g
FAC 62-296.700	Particulate Matter RACT - NOT APPLICABLE to most sources ^h

MWCs - Applicable Regulations:

40 CFR 60 Subpart A	New Source Performance Standards-General Provisions
40 CFR 60 Subpart Cb	Emissions Guidelines for Large MWCs ⁱ
40 CFR 60 Subpart E	Standards of Performance for Incinerators
FAC 62-204.800(8)(b)	Emissions Guidelines for Large MWCs ⁱ
FAC 62-210.700	Excess Emissions

^eEmission units in this application are not subject to FAC 62-296.320(4)(a). The MWCs are subject to a particulate limit elsewhere in this chapter (FAC 62-296.401(3)(a)) and are also exempted by FAC 62-296.320(4)(a)1.b (i.e. burn refuse). The lime and carbon storage silos, wet scrubbers, and diesel engine, are exempted by FAC 62-296.320(4)(a)1 since they do not process raw materials to produce a finished product through a chemical or physical change.

^fFlorida VOC RACT rules at FAC 62-296.500 to .516 or FAC 62-296.401 to .415 could be applicable (except for emission units which received BACT/LAER determinations pursuant to FAC 62-212.400/.500) since Pinellas County is an ozone maintenance area (together with Hillsborough County as defined at FAC 62-204.340(4)(a)4). However, there are no VOC RACT requirements in FAC 62-296.500 to .516 or FAC 62-296.401 to .415 applicable to any emissions unit at the Pinellas County complex (and the MWCs underwent BACT review as part of the original PSD permits). Also, the VOC and NO_x RACT rules in FAC 62-296.570 are not applicable since these requirements apply only to Broward, Dade, and Palm Beach Counties as described at FAC 62-296.500(1)(b).

^gFlorida Pb RACT rules at FAC 62-296.600 to .605 could be applicable since the Pinellas County complex is located 25 km from a Pb maintenance area (portion of Hillsborough County as defined at FAC 62-204.340(4)(c)) and therefore located within the "area of influence" (i.e., within 50 km of area boundary). However, there are no Pb RACT requirements in FAC 62-296.601 to .605 applicable to any emissions unit at the complex.

^hFlorida PM RACT rules at FAC 62-296.700 to .712 or FAC 62-296.401 to .415 could be applicable (except for emission units which received BACT/LAER determinations pursuant to FAC 62-212.400/.500) since the Pinellas County complex is located 15 km from a PM maintenance area (portion of Hillsborough County as defined at FAC 62-204.340(4)(b)1) and therefore located within the "area of influence" (within 50 km of area boundary). However, unconfined (fugitive) emissions associated with the landfill and other activities are exempted from PM RACT by FAC 62-296.700(2)(e) (exempts unconfined emissions associated with open stockpiling of materials, vehicular traffic, and other emissions from roads, plant grounds, or construction activities) and 62-296.700(2)(d) (exempts all unconfined emissions located more than 5 km from the boundary of the maintenance area). Other sources in this application exempt from PM RACT requirements are described below:

MWC Units 1-3:	Exempted by undergoing PSD review and receiving BACT determination (all MWC units meet the PM emission requirement of 0.08 gr/dscf pursuant to FAC 62-296.401(3));
Water Softening	Exempted from PM RACT requirements by Department during permit review pursuant to
System Lime Silo:	FAC 62-296.700(2)(a) (permit limits emissions to less than 5 lb/hour and 15 tons/year);
Lime/Carbon	Exempted from PM RACT requirements pursuant to FAC 62-296.600(2)(a) since
Storage Silos:	maximum emissions are 0.05 lb/hour and 0.22 tons/year each; and
Mulch Engine:	No RACT requirements identified.

ⁱ40 CFR 60 Subpart Cb requirements typically apply to each MWC unit only after the MWC air pollution control equipment is retrofit for EG requirements (one exception is the training requirements at 40 CFR 60.54b).

**LIST OF APPLICABLE REGULATIONS
PINELLAS COUNTY RESOURCE RECOVERY FACILITY
REVISED TITLE V OPERATION PERMIT APPLICATION
(Continued)**

MWCs - Applicable Regulations: (Concluded)

FAC 62-296.320(4)(b)	General Visible Emission Standards
FAC 62-296.401(3)	Specific Emission Limiting and Performance Standards - Requirements (PM/Odor) for New Incinerators (after 1/18/72) with Charging Rates equal to or greater than 50 tons per day
FAC 62-296.416(3)(a)1	Mercury Emissions Limiting Standards (Waste-to-Energy Facilities) ^j
FAC 62-297.310(1)	Required Number of Tests
FAC 62-297.310(2)	Operating Rate during Testing
FAC 62-297.310(3)	Calculation of Emission Rate
FAC 62-297.310(4)	Applicable Test Procedures
FAC 62-297.310(6)	Required Stack Sampling Facilities
FAC 62-297.310(7)	Frequency of Compliance Tests
FAC 62-297.310(8)	Test Reports

Water Softening Plant Lime Silo and Lime/Carbon Silos - Applicable Regulations:

FAC 62-296.320(4)(b)	General Visible Emission Standards
FAC 62-296.700(2)(a)	Department exempted source from PM RACT Requirements ^k
FAC 62-296.700(5)	Prohibition on circumventing emission limit by increasing the volume of gas for purposes of reducing the stack gas concentration.
FAC 62-297.310(2)	Operating Rate during Testing
FAC 62-297.310(4)(a)2	Applicable Test Procedures-Opacity Compliance Tests
FAC 62-297.310(7)(a)1	General Compliance Testing (initial opacity test)
FAC 62-297.310(7)(a)4a	General Compliance Testing (annual opacity tests) ^k
FAC 62-297.310(8)	Test Reports
FAC 62-297.401(9)(c)	DEP Method 9
FAC 62-297.620(4)	Department waived test requirements for PM emissions and specified an alternative standard of 5% opacity in the permit or PPSA Conditions of Certification as required by regulation.

Metal Recovery System/Ash Conditioning Building Wet Scrubbers - Applicable Regulations:

FAC 62-210.700	Excess Emissions
FAC 62-296.320(4)(b)	General Visible Emission Standards
FAC 62-296.700(5)	Prohibition on circumventing emission limit by increasing the volume of gas for purposes of reducing the stack gas concentration.
FAC 62-296.711(2)(a)	Opacity from handling operations limited to no visible emissions (5% opacity)
FAC 62-296.711(2)(b)	PM emissions from the stack are limited to 0.03 gr/dscf.
FAC 62-297.310(2)	Operating Rate during Testing
FAC 62-297.310(4)(a)2	Applicable Test Procedures-Opacity Compliance Tests

^jFlorida mercury limits are applicable to each MWC only after SDA installed according to FAC 62-296.416(3)(a)2.

^kApplicable to Water Softening Plant Lime Silo only.

**LIST OF APPLICABLE REGULATIONS
PINELLAS COUNTY RESOURCE RECOVERY FACILITY
REVISED TITLE V OPERATION PERMIT APPLICATION
(Concluded)**

Metal Recovery System/Ash Conditioning Building Wet Scrubbers - Applicable Regulations:

- | | | |
|-----------------------|---|-------------|
| FAC 62-297.310(7)(a)1 | General Compliance Testing (initial opacity test) | (Concluded) |
| FAC 62-297.310(8) | Test Reports | |
| FAC 62-297.401(9)(c) | DEP Method 9 | |
| FAC 62-297.620(4) | Department waived test requirements for PM emissions and specified an alternative standard of 5% opacity in the PPSA Conditions of Certification as required by regulation. | |

Mulching Area Diesel Engine - Rule Applicability:

- | | |
|----------------------|--|
| FAC 62-210.300(3)(b) | Temporary Exemptions "...an emissions unit that is described in a timely and complete permit application under Chapter 62-213, F.A.C., and not subject to an existing valid air permit, shall be exempt from the permitting requirements of this Chapter, Chapter 62-4, and Rule 62-212.300, F.A.C., until a final determination on a permit application under Chapter 62-213, F.A.C., is made." |
| FAC 62-212.300 | General Preconstruction Review Requirements ¹ |

Mulching Area Diesel Engine - Applicable Regulations:

- | | |
|----------------------|------------------------------------|
| FAC 62-210.700 | Excess Emissions |
| FAC 62-296.320(4)(b) | General Visible Emission Standards |

Bridgeway Acres Landfill - Applicable Regulations:

- | | |
|----------------------|---|
| 40 CFR 60 Subpart Cc | Emission Guidelines for Muncipal Solid Waste Landfills ^m |
| FAC 62-204.800(8)(c) | Emission Guidelines for Muncipal Solid Waste Landfills ^m |

¹Since the source has emissions less than the significant emission rates in Table 212.400-2, the source as a modification is not subject to PSD requirements of FAC 62-212.400 according to FAC 62-212.400(2)(d)4a(ii).

^mAs discussed in Attachements 8 and 10, initial reporting requirements (Tier I and Tier II analysis) have already been submitted to the Department. The Tier II analyses show that no control requirements are required under 40 CFR 60.33c since NMOC emissions are/will be less than 50 Mg/year. Therefore, only recordkeeping and reporting requirements specified by 40 CFR 60.34c and 60.35c apply -- namely, 40 CFR 60.752(b)(1) and 60.757(b) for calculating and reporting NMOC emissions annually or, as provided in 60.757(b)(1)(ii), every five years; 40 CFR 60.754(a)(3) for calculating emissions based on Tier II test methods and procedures; 40 CFR 60.754(a)(3)(iii) to retest the site-specific NMOC concentration every five years; and 40 CFR 60.758(a) for recordkeeping requirements.

**FACILITY PLOT PLANS
PINELLAS COUNTY RESOURCE RECOVERY FACILITY
REVISED TITLE V PERMIT APPLICATION**

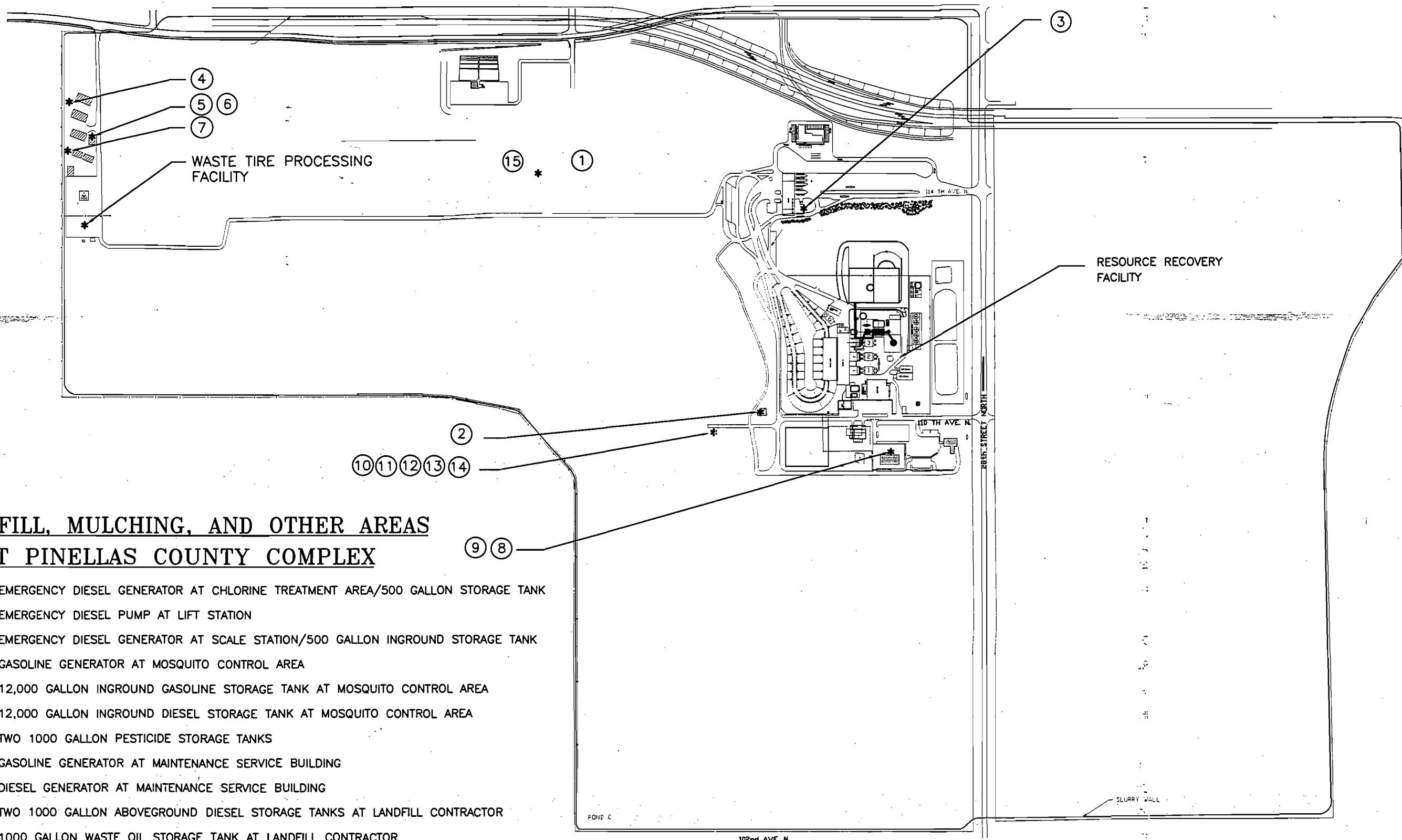
Attached to the original Title V application were the following plot plans:

Bridgeway Acres Aerial Site Plan-Northern Site	HDR No: 01617-188-096/P-1
Bridgeway Acres Aerial Site Plan-Southern Site	HDR No: 01617-188-096/P-2
Existing PCRRF Site Plan	HDR No: 01617-188-096/P-3

Included in the March 1999 revisions were the following plot plans showing insignificant source locations and retrofits to MWC Unit 3:

Title V Permit Application Site Plan	HDR Figure No: P-1 (Mar 99)
Title V Air Permit - Completion of Phase I Retrofit	HDR Figure No: P-3 (Mar 99)

X:\PINELLAS\RRRETRO\STAGIPERM.DGN



SCALE: 1" = 650'

**LANDFILL, MULCHING, AND OTHER AREAS
AT PINELLAS COUNTY COMPLEX**

- (1) EMERGENCY DIESEL GENERATOR AT CHLORINE TREATMENT AREA/500 GALLON STORAGE TANK
- (2) EMERGENCY DIESEL PUMP AT LIFT STATION
- (3) EMERGENCY DIESEL GENERATOR AT SCALE STATION/500 GALLON INGROUND STORAGE TANK
- (4) GASOLINE GENERATOR AT MOSQUITO CONTROL AREA
- (5) 12,000 GALLON INGROUND GASOLINE STORAGE TANK AT MOSQUITO CONTROL AREA
- (6) 12,000 GALLON INGROUND DIESEL STORAGE TANK AT MOSQUITO CONTROL AREA
- (7) TWO 1000 GALLON PESTICIDE STORAGE TANKS
- (8) GASOLINE GENERATOR AT MAINTENANCE SERVICE BUILDING
- (9) DIESEL GENERATOR AT MAINTENANCE SERVICE BUILDING
- (10) TWO 1000 GALLON ABOVEGROUND DIESEL STORAGE TANKS AT LANDFILL CONTRACTOR
- (11) 1000 GALLON WASTE OIL STORAGE TANK AT LANDFILL CONTRACTOR
- (12) 275 GALLON GASOLINE STORAGE TANK AT LANDFILL CONTRACTOR
- (13) 275 GALLON OIL STORAGE TANK AT LANDFILL CONTRACTOR
- (14) 275 GALLON HYDRAULIC OIL STORAGE TANK AT LANDFILL CONTRACTOR
- (15) SEVEN 1 TON CHLORINE CYLINDERS



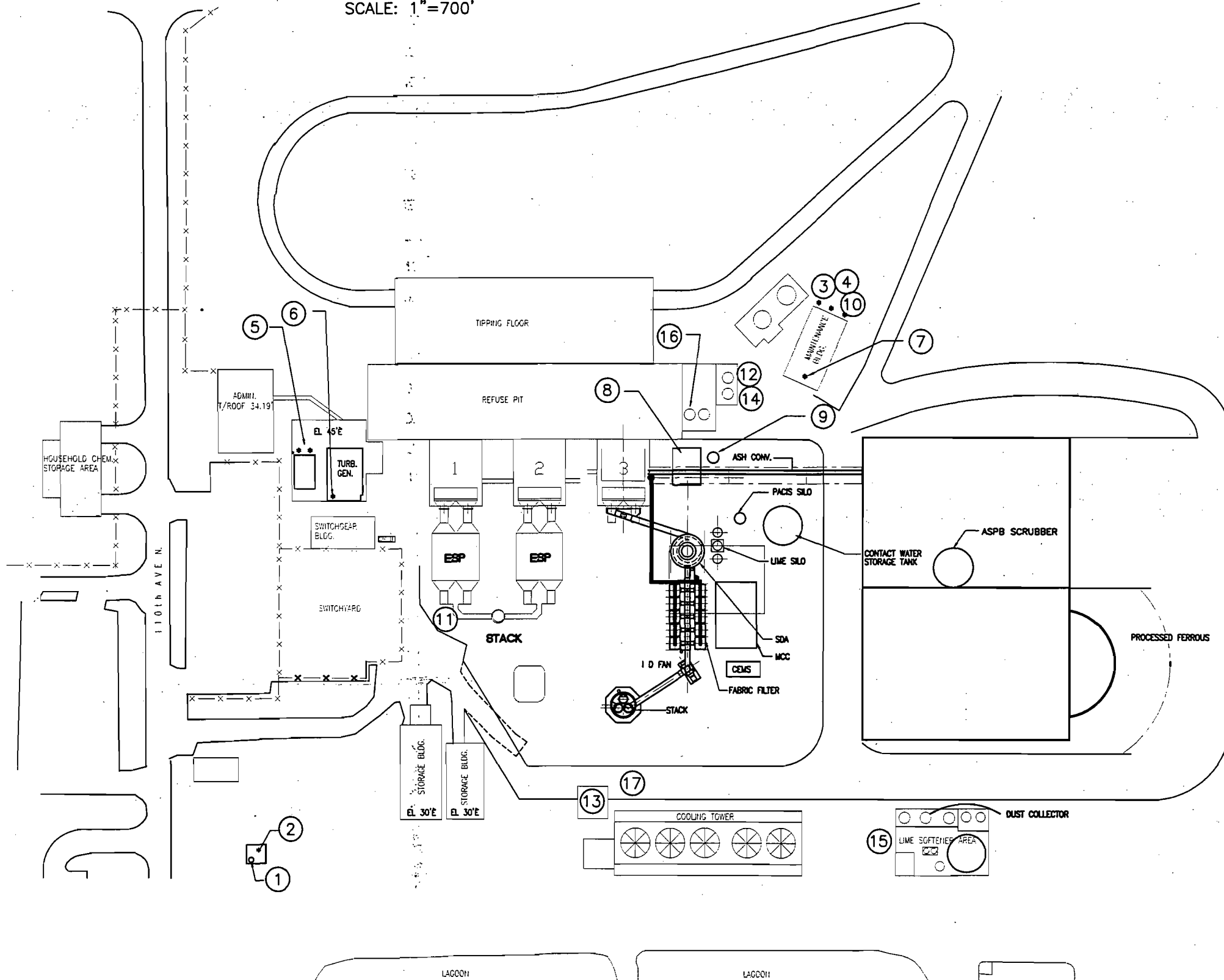
**PINELLAS COUNTY
TITLE V PERMIT APPLICATION
SITE PLAN**

Date	MAR 99
Figure	P-1

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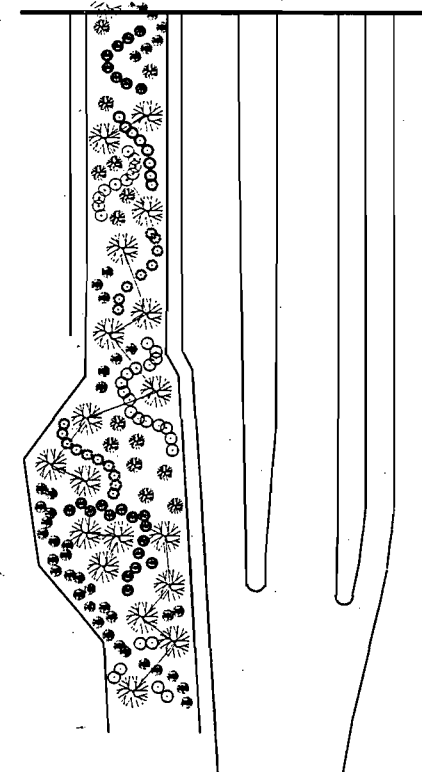


SCALE: 1"=700'



RESOURCE RECOVERY FACILITY AREA

- (1) 500 GALLON DIESEL OIL STORAGE TANK
- (2) EMERGENCY DIESEL FIRE PUMP
- (3) 250 GALLON DIESEL OIL STORAGE TANK
- (4) 250 GALLON DIESEL OIL STORAGE TANK
- (5) TWO 2000 GALLON TURBINE OIL STORAGE TANKS
- (6) ONE 2000 GALLON TURBINE OIL COLLECTION TANK
- (7) WELDING STATION VENT IN MAINTENANCE BUILDING
- (8) CONDITIONED ASH CONVEYOR BUILDING
- (9) 20,000 GALLON PHOSPHORIC ACID STORAGE TANK
- (10) 250 GALLON UNLEADED GASOLINE STORAGE TANK
- (11) 7800 GALLON PHOSPHORIC ACID TANK
- (12) 5200 GALLON CAUSTIC STORAGE TANK
- (13) 5000 GALLON SULFURIC ACID STORAGE TANK
- (14) 5200 GALLON SULFURIC ACID STORAGE TANK
- (15) 8000 GALLON SODIUM CARBONATE STORAGE TANK
- (16) 20,000 GALLON UREA STORAGE TANK
- (17) FIVE 1 TON CHLORINE CYLINDERS



PINELLAS COUNTY
TITLE V AIR PERMIT
COMPLETION OF PHASE I
RETROFIT

Date
MAR 99
 Figure
P-3

**LIST OF INSIGNIFICANT ACTIVITIES
PINELLAS COUNTY RESOURCE RECOVERY FACILITY
REVISED TITLE V PERMIT APPLICATION**

RESOURCE RECOVERY FACILITY AREA

- (1) 500 gallon Diesel Oil Storage Tank
- (2) Emergency Diesel Fire Pump^a
- (3) 250 gallon Diesel Oil Storage Tank
- (4) 250 gallon Hydraulic Oil Storage Tank
- (5) Two 2000 gallon Turbine Oil Storage Tanks
- (6) One 2000 gallon Turbine Oil Collection Tank
- (7) Welding Station Vent in Maintenance Building
- (8) Conditioned Ash Conveyor Building
- (9) 20,000 gallon Phosphoric Acid Storage Tank
- (10) 250 gallon unleaded Gasoline Storage Tank
- (11) 7800 gallon Phosphoric Acid Storage Tank
- (12) 5200 gallon Caustic Storage Tank
- (13) 5000 gallon Sulfuric Acid Storage Tank
- (14) 5200 gallon Sulfuric Acid Storage Tank
- (15) 8000 gallon Sodium Carbonate Storage Tank
- (16) 2000 gallon Urea Storage Tank
- (17) Five 1-ton Chlorine Cylinders

LANDFILL, MULCHING, AND OTHER AREAS AT PINELLAS COUNTY COMPLEX

- (1) Emergency Diesel Generator at Chlorine Treatment Area^a/500 gallon Storage Tank
- (2) Emergency Diesel Pump at Lift Station^a
- (3) Emergency Diesel Generator at Scale Station^a/500 gallon Inground Storage Tank
- (4) Gasoline Generator at Mosquito Control Area^a
- (5) 12,000 gallon Inground Gasoline Storage Tank at Mosquito Control Area
- (6) 12,000 gallon Inground Diesel Storage Tank at Mosquito Control Area
- (7) Two 1000 gallon Pesticide Storage Tanks
- (8) Gasoline Generator at Maintenance Service Building^a
- (9) Diesel Generator at Maintenance Service Building^a
- (10) Two 1000 gallon Aboveground Diesel Storage Tanks at Landfill Contractor
- (11) 1000 gallon Waste Oil Storage Tank at Landfill Contractor
- (12) 275 gallon Gasoline Storage Tank at Landfill Contractor
- (13) 275 gallon Oil Storage Tank at Landfill Contractor
- (14) 275 gallon Hydraulic Oil Storage Tank at Landfill Contractor
- (15) Seven 1-ton Chlorine Cylinders

^aOperation of the emergency generators and general purpose internal combustion engines meet the conditions of FAC 62-210.300(3)(a)20 and 21 for full exemption from permitting requirements. None of the sources are subject to the Federal Acid Rain Program and total prorated fuel consumption is less than 32,000 gallons per year of diesel fuel or 4,000 gallons per year of gasoline. Most onsite fuel storage is for vehicular use, exempted by FAC 62-210.300(3)(a)5.

**ENHANCED MONITORING PLAN
PINELLAS COUNTY RESOURCE RECOVERY FACILITY
REVISED TITLE V PERMIT APPLICATION**

The Pinellas County Resource Recovery Facility (PCRRF) will continue to comply with the current air monitoring requirements contained in the PPSA Conditions of Certification. For the existing units before Emission Guideline (EG) retrofits^a, monitoring requirements are annual stack/observer testing for opacity, particulate, and SO₂ emissions in accordance with federal and state stack test procedures for determining compliance with permit limits. Continuous opacity monitors are maintained in the common stack for MWC units 1 and 2. In addition to the permit monitoring requirements, stack testing for mercury (Hg) was initiated in 1993 according to the Mercury Emissions Inventory Testing requirements of FAC 62-296.416(3)(e) (Waste-to-Energy Facilities). Pinellas County, in cooperation with the Department and USEPA Region IV, has performed numerous tests of dioxin emissions and will continue periodic dioxin testing of units not yet retrofit for EG requirements.

For retrofit units, the EGs require annual stack tests for PM, opacity, HCl, metals, dioxins, and fugitive emissions and CEMs for opacity, NO_x, and SO₂. The SO₂ CEM will insure continuous compliance with other acid gas limits (i.e., HCl). In addition, continuous monitoring of CO emissions, baghouse inlet temperature, steam load, and carbon injection rate insures continuous compliance with the particulate, dioxin, and metals standards. Since the EG testing/monitoring requirements under Section 129 are identical to the NSPS requirements under Section 111, they are presumed to meet EPA's periodic monitoring requirements (see page 5 in September 15, 1998 EPA memo from Eric Schaeffer and John Seitz on Periodic Monitoring Guidance for Title V Operating Permits Programs) and are exempt from compliance assurance monitoring (CAM) under 40 CFR 64.2(b)(i).

Other emission units with existing monitoring requirements are:

Lime Silo: (Water Soft- ening System)	Initial and annual (with 60 days prior to or on February 15th) Method 9 opacity observer tests required by AO52-268853 (Specific Condition 3) showing no visible emissions in lieu of performing particulate stack tests pursuant to FAC 62-297.620(4).
Miscellaneous Minor Sources ^b	Initial Method 9 opacity observer tests required by PPSA Conditions of Certification showing no visible emissions in lieu of performing particulate stack tests pursuant to FAC 62-297.620(4).

No additional monitoring is proposed beyond that already performed since the EG requirements are presumed to meet/exempt from periodic monitoring/CAM requirements.

^aAt present, only unit #3 has been retrofit for the EG requirements.

^bWet scrubber outlets for flyash conditioning building and metal recovery area and dust collector vents for lime and carbon storage silos.

**COMPLIANCE REPORT AND PLAN
PINELLAS COUNTY RESOURCE RECOVERY FACILITY
REVISED TITLE V PERMIT APPLICATION**

Compliance Report

The Pinellas County Resource Recovery Facility (PCRRF) performs annual and continuous monitoring for the three Municipal Waste Combustors (MWCs) as required by the PPSA permit and as described in the previous attachment (Attachment 7 to the Title V permit application). Quarterly Excess Emission and Monitoring System Performance reports are submitted by the facility operator (Wheelabrator Pinellas, Inc.) based on continuous monitoring data. Annual compliance testing of the existing MWC units has been performed since at least 1988, reports from which have been submitted to the Southwest District Office in accordance with the Department's rules and permit requirements. Only one of the existing MWC units has ever exceeded any of its permit limits based on annual compliance stack testing over the last eight years (April 1990 compliance tests for SO₂ for unit 1). Therefore, the existing MWCs are expected to comply with all current permit limits.

The ESP for unit #3 was replaced with scrubber/baghouse/carbon injection/SNCR controls as required by the Emission Guidelines (EGs). Stack testing for emissions of dioxins, metals, PM, and HCl for the retrofit unit #3 in accordance with the EG requirements was performed in December 1998. Method 22 tests were performed for the ash handling system for the EG fugitive emission requirements. Continuous measurement of NO_x, SO₂, and CO and operational parameters of baghouse inlet temperature, steam load, and carbon injection reate for unit #3 were also instituted as required by the EG. Compliance with all the EG limits was demonstrated. Therefore, both unit #3 and units #2 and #1 when retrofit for the EG requirements are expected to comply with the EG limits.

The operating permit (AO52-268853) for the hydrated lime storage silo (water treatment system) requires annual Method 9 visible emission (VE) tests demonstrating no VE in accordance with FAC 62-297.620(4). The lime silo baghouse had no visible emissions during the initial stack test on February 15, 1995 and subsequent annual tests on January 5, 1996; January 7, 1997; and January 29, 1998 as required. Continued compliance with emission limits for opacity and PM are expected for this emissions unit.

As part of this initial Title V operating permit application, information for a diesel engine used in mulching activities in contiguous solid waste operational areas near the PCRRF is provided. An after-the-fact construction permit and temporary exemption for this source is requested in accordance with FAC 62-210.300(3)(b) for this source.

There are several small particulate sources associates with the EG improvements which are not regulated by EG requirements. These sources are wet scrubbers used to eliminate fugitive emissions from operations in the flyash conditioning building and metal recovery area and dust collectors used to reduce emissions during filling operations for the lime and carbon storage silos.

These minor particulate sources were included in construction permit applications for the facility improvements to meet the EGs. The construction permit was effectively approved by modifications to the Conditions of Certification signed July 25, 1996 and May 19, 1998. The revised Conditions of Certification require a Method 9 test showing no visible emissions in lieu of performing particulate stack tests for these minor PM sources. VE tests were performed for these minor sources on December 4, 1998 and February 3, 1999 as part of the EG tests for retrofit unit #3. These sources had no visible emissions as required. Continued compliance with emission limits for opacity and PM are expected for these minor particulate sources.

Insignificant emission sources at the PCRRF and contiguous solid waste areas are listed in Attachment 6 to this application. Title V permit restrictions are requested to limit operation of emergency generators, general purpose internal combustion engines, and heating units to annual fuel consumption levels specified at FAC 62-210.300(3)(a)(20) and (21) as described in Attachment 6, which will exempt these sources from permitting requirements.

Compliance Plan(Schedule)

As noted above, the MWC units are currently in compliance with current permit conditions. Submittal of the Title V permit application initiates permitting requirements for insignificant sources (Attachment 6) and the mulching area diesel engine and will bring these sources into compliance. Pinellas County will comply with all future informational and other requests for these unpermitted sources.

Since submittal of the initial Title V application, the state regulations at FAC 62-204.800(8) have been revised to include the MWC EGs at 40 CFR 60 Subpart Cb and the Municipal Waste Landfill (MWL) EGs at 40 CFR 60 Subpart Cc. The MWC EGs were initially published in the December 19, 1995 Federal Register (60 FR 65387). The State plan for the December 19, 1995 EGs was approved by EPA on November 13, 1997 (62 FR 60785). Thus, final compliance with the EGs is required by November 13, 2000 (i.e., within 3 years of approval of the State plan). The Federal MWC EGs were revised on August 25, 1997 (62 FR 45115) in response to the Davis County remand. For large MWC units (like Pinellas County), the only significant changes are more stringent emission limitations for Pb, HCl, and SO₂ and a less stringent emission limitation for NO_x. The State plan for the revised August 25, 1997 limits has not yet been approved by EPA (EPA approval is expected in early 1999). Compliance with the Pb, HCl, and SO₂ limits must be achieved by August 26, 2002 or three years after State plan approval, whichever occurs first (40 CFR 60.39b(f)). State plans can adopt the less restrictive NO_x limit prior to EPA approval of the State plans for the August 25, 1997 EGs.

Pinellas County submitted a formal compliance schedule, compliance plan, and closure agreement for the MWC EGs on September 13, 1996 (copy attached) as required by FAC 62-204.800(8)(b)9. The submittal contained performance test results for dioxin/furan emissions as required by 40 CFR 60.39b(c)(2), which allows for up to 3 years after State plan approval to complete modifications as required by the EGs (40 CFR 60.39b(c)(1)(i)). The compliance schedule included compliance dates for the increments of progress given at 40 CFR 60.21(h) as

required by FAC 62-204.800(8)(b)(9). The formal compliance schedule and dates are compared on Table 1 to the actual dates on which compliance was achieved. As can be seen, Pinellas County is meeting or exceeding the formal compliance schedule dates. EG retrofits for Unit 3 have been completed and compliance tests were performed in December 1998. Therefore, the MWC retrofits are about one year ahead of schedule at the present time. Due to the possibility of unforeseen circumstances, Pinellas County is not proposing any changes to the formal compliance schedule for Units 2 or 1.

Pinellas County landfills MWC ash and some municipal solid waste at the Bridgeway Acres landfill. Since the landfill is contiguous to the MWC facility, has the same owner and 2-digit SIC code (49), the resource recovery facility and landfill are considered to be the same facility for Title V permitting purposes. The MWL EGs were published in the March 12, 1996 Federal Register (61 FR 9919). The State plan for MWL EGs has not yet been approved by EPA. If Florida does not receive State plan approval for MWL EGs, Federal plan requirements under 40 CFR 62 Subpart GGG would eventually apply (Subpart GGG requirements were proposed in the December 16, 1998 Federal Register at 62 FR 69364). At this time, formal EPA approval of the State Plan is expected prior to final promulgation of Federal Plan requirements.

As required under State rule requirements in FAC 62-204.800(8)(c), Pinellas County submitted a design capacity report and initial NMOC emissions estimate in December 1996. Pinellas County submitted a Tier II analysis in February 1998 showing landfill emissions had NMOC concentrations of 200 ppm_{dv} (as hexane) and total landfill emissions would not exceed 50 Mg/yr. Therefore, collection and control of landfill gas will not be required and a compliance plan for the MWL EGs is not required.

Thus, the facility is currently meeting all compliance schedule requirements under the MWC and MWL EGs.

TABLE 1
MWC EGs COMPLIANCE SCHEDULE

<u>Increment of Progress (per 40 CFR 60.21(h))</u>	<u>Formal Compliance Date</u>	<u>Actual Compliance Date</u>
(1) Submittal of Final Control Plan	January 1, 1997	
EG Retrofit Application Submitted		March, 1995
PSD Permit Amendment Issued		October 10, 1995
Final Order modifying PPSC Issued		July 25, 1996
(2) Award Contract for EG Modifications	January 1, 1997	August 20, 1996
(3) Initiate Onsite Construction	June 19, 1997	September 2, 1996
(4) Complete Onsite Construction		
MWC Unit 3	June 19, 1999	September 24, 1998
MWC Unit 2	December 19, 1999	N/A
MWC Unit 1	June 19, 2000	N/A
(5) Final Compliance		
MWC Unit 3	December 19, 1999	December, 1998
MWC Unit 2	June 19, 2000	N/A
MWC Unit 1	November 13, 2000 ^a	N/A

^aOriginally proposed as December 19, 2000 in the formal compliance schedule, which was submitted prior to EPA approval of the State plan (i.e., which set the final effective date for Florida MWCs as November 13, 2000).

LANDERS & PARSONS, P.A.
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SEP 16 1996
0995
WASTE OPERATIONS

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September 13, 1996

Mr. Michael W. Hewett
Department of Environmental
Protection
Division of Air Resources Management
2600 Blair Stone Road
Twin Towers Office Building
Tallahassee, Florida 32399

Re: Compliance Schedule for Pinellas County's
Resource Recovery Facility

Dear Mr. Hewett:

This law firm assists Pinellas County with various environmental law issues affecting the County's Resource Recovery Facility (Facility). On behalf of Pinellas County, we are submitting the following compliance schedule for the County's Facility, as requested by the Florida Department of Environmental Protection (DEP).

On December 19, 1995, the United States Environmental Protection Agency (EPA) promulgated Emission Guidelines for Municipal Waste Combustors (MWC), which establish stringent new requirements for MWCs, including Pinellas County's Facility. See 40 CFR 60, Subpart Cb. The County plans to install new air pollution control equipment in the Facility to comply with the Emission Guidelines, but the timetable for completing these improvements will extend more than 12 months beyond the date when EPA is expected to approve Florida's Section 111(d) plan. Accordingly, as requested by DEP, the County is submitting the following compliance schedule for DEP's review.

Please note that Pinellas County will use its best efforts to complete construction of the new air pollution control systems and bring the Facility into compliance with the Emission Guidelines before the deadlines identified below. The County expects to achieve compliance with the Emission Guidelines in less than 36 months after EPA approves Florida's Section 111(d) program (i.e., construction should be completed and compliance

Mike Hewett
Page Two
September 13, 1996

attained before June 19, 2000). Nonetheless, the County's compliance schedule contains a conservative timetable because the County recognizes that the compliance schedule is federally enforceable and thus must not be exceeded.

Since the compliance schedule is not automatically extended by force majeure events (i.e., delays caused by events beyond the control of the County), the County also is submitting a closure agreement with the compliance schedule. If the County's project is delayed unexpectedly, the County will cease operating any MWC unit that is not in compliance with Subpart Cb by the appropriate deadline (i.e., 36 months after EPA approves Florida's Section 111(d) plan).

We also have attached a copy of the "emissions inventory" for the Facility. This inventory is based on the most recent stack test data and should be used in lieu of the draft emission inventory that was prepared by DEP.

COMPLIANCE SCHEDULE

1. Deadline for Submittal of Final Compliance Plan

Pinellas County already has submitted an application to DEP concerning Pinellas County's plan to install new air pollution control equipment at the Facility. Indeed, DEP has modified the conditions of certification for the Facility and thereby authorized the construction of the new air pollution control systems. In effect, the County has submitted its "final control plan" to DEP; however, to ensure that there are no questions about the County's actions, we are submitting a final compliance plan to DEP with this letter. If there are any questions about the plan, we will address those questions during the next few months. Accordingly, the deadline for the submittal of the County's final compliance plan, with any necessary revisions, should be January 1, 1997.

2. Deadline for Award of Contract

Pinellas County already has awarded a contract for the design and construction of the new air pollution control systems that will be installed at the County's Facility. Again, to ensure that these actions satisfy DEP's needs, it would be appropriate to establish January 1, 1997 as the County's deadline for awarding a contract in this case.

Mike Hewett
Page Three
September 13, 1996

3. Initiate On-Site Construction

Pinellas County plans to initiate on-site construction of the Facility's improvements on or before June 19, 1997.

4. Complete Construction

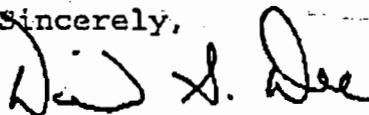
Pinellas County will complete the construction of the improvements to Unit No. 3 on or before June 19, 1999. Construction on Unit No. 2 will be completed on or before December 19, 1999. Construction on Unit No. 1 will be completed on or before June 19, 2000.

5. Demonstrate Compliance

The stack emissions from Unit 3 will be in compliance with the applicable provisions in the Emission Guidelines by December 19, 1999. The stack emissions from Unit 2 will be in compliance by June 19, 2000. The stack emissions for Unit No. 1 will be in compliance by December 19, 2000. Please note, however, that Units 1, 2, and 3, may not be in compliance with the requirements for fugitive emissions until December 19, 2000. Fugitive emissions will be controlled by building an enclosure around the units, but the construction of the enclosures cannot be completed until after the other construction on-site has been finished.

Please call us if you have any questions about the compliance schedule.

Sincerely,



David S. Dee

cc: Susan Churuti
Julie Yard
Pick Talley
Mike Rudd
Russ Menke
Pete Stasis

/vc:HEWETT

111(d) State Plan: MWC Emissions Inventory Data

Facility Name	Unit	Pollutant	111(d) Inventory	
			Date ^a	Emission Rate ^b
Pinellas County Resource Recovery F	1	Opacity	04/16/96	0 percent
	1	CO	03/14/96	21.9 ppmvd
	1	PM	03/11/96	37.5 mg/dscm
	1	NOx	03/14/96	221 ppmvd
	1	HCL	estimated	520 ppmvd
	1	SO2	03/11/96	116 ppmvd
	1	Cd	estimated	0.08015 mg/dscm
	1	Pb	estimated	0.372 mg/dscm
	1	Hg	03/12/96	0.220mg/dscm
	1	Dioxin/Fura	03/14/96	2440 ng/dscm
	2	Opacity	03/13/96	<5 percent
	2	CO	11/07/95	13.92 ppmvd
	2	PM	03/13/96	32.2 mg/dscm
	2	NOx	11/07/95	221 ppmvd
	2	HCL	estimated	520 ppmvd
	2	SO2	03/13/96	75.7 ppmvd
	2	Cd	estimated	0.08015 mg/dscm
	2	Pb	estimated	0.372 mg/dscm
	2	Hg	03/14/96	0.271 mg/dscm
	2	Dioxin/Fura	11/07/95	9045 ng/dscm
	3	Opacity	03/15/96	<5 percent
	3	CO	03/15/96	9.81 ppmvd
	3	PM	03/15/96	16.9 mg/dscm
	3	NOx	03/15/96	248 ppmvd
	3	HCL	estimated	520 ppmvd
	3	SO2	03/15/96	53.6 ppmvd
	3	Cd	estimated	0.08015 mg/dscm
	3	Pb	03/15/96	0.0847 mg/dscm
	3	Hg	03/15/96	0.252 mg/dscm
	3	Dioxin/Fura	08/01/95	2482 ng/dscm

a The inventory must include the most current emissions data available.

b The inventory emissions data must be listed in the following units: (all units are @ 7 %

Opacity - percent

Carbon Monoxide - ppmvd

Hydrogen Chloride - ppmvd

Sulfur Dioxide - ppmvd

Nitrogen Oxides - ppmvd

Particulate Matter - mg/dscm

Cadmium - mg/dscm

Lead - mg/dscm

Mercury - mg/dscm

Total Dioxin/Furan - ng/dscm

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September 13, 1996

Mr. Michael W. Hewett
Department of Environmental
Protection
Division of Air Resources Management
2600 Blair Stone Road
Twin Towers Office Building
Tallahassee, Florida 32399

Re: Pinellas County's Final Compliance Plan

Dear Mr. Hewett:

This law firm assists Pinellas County with various environmental law issues affecting the County's Resource Recovery Facility (Facility). On behalf of Pinellas County, we are submitting this letter to you to ensure that the County is in compliance with the requirements of EPA's Emission Guidelines for Municipal Waste Combustors (MWC), which are codified in 40 CFR 60, Subpart Cb. This letter constitutes Pinellas County's "Final Compliance Plan" for the County's Facility.

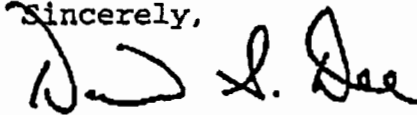
To comply with EPA's Emission Guidelines, Pinellas County will install new air pollution control systems and make other improvements to the Facility. The County will use: a fabric filter baghouse to control particulate emissions; a scrubber to control acid gases; a selective non-catalytic reduction system to control NOx emissions; and a carbon injection system to control mercury and certain organics. The County will install an auxiliary burner to maintain minimum furnace temperatures during start-up and shut-down operations. The County will install continuous emission monitors to monitor the operation of the Facility.

The County's proposal is described in more detail in the County's application (dated May 1995) for modification of the conditions of certification for the County's Facility. The County's application was approved by DEP and modified conditions of certification were issued in July 1996. You may wish to review those materials if you need additional information concerning the County's proposal.

Mike Hewett
Page Two
September 13, 1996

We assume that this letter is sufficient to satisfy DEP's needs for a Final Compliance Plan. However, please feel free to call me if you need any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "D. S. Dee". The signature is written in a cursive style with a large initial "D" and a distinct "S" and "Dee".

David S. Dee

cc: Susan Churuti
Julie Yard
Pick Talley
Mike Rudd
Russ Menke
Pete Stasis

/vc:Hewett3

LANDERS & PARSONS, P.A.

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September 13, 1996

Mr. Michael W. Hewett
Department of Environmental Protection
Division of Air Resources Management
2600 Blair Stone Road
Twin Towers Office Building
Tallahassee, Florida 32399

Re: Closure Agreement for Pinellas County

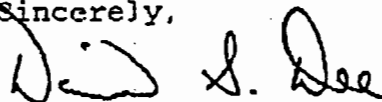
Dear Mr. Hewett:

This law firm assists Pinellas County with certain environmental law issues affecting the County's Resource Recovery Facility (Facility). On behalf of Pinellas County, we are submitting this closure agreement to the Department of Environmental Protection in accordance with the requirements established in EPA's Emission Guidelines for Municipal Waste Combustors (MWC), which are codified at 40 CFR 60, Subpart Cb.

Pinellas County agrees that it will cease operating any MWC unit at the County's Resource Recovery Facility which is not operating in compliance with the applicable regulations set forth in 40 CFR 60, Subpart Cb, within 36 months after EPA approves the State of Florida's Section 111(b) plan. If an MWC unit is taken out of operation in accordance with this agreement, the MWC unit will not be returned to operation until the County has completed construction of the air pollution control systems and other improvements necessary to bring the unit into compliance with the applicable MWC regulations. After the completion of construction, the MWC unit will start up and commence initial testing (i.e., debugging or shakedown operations). The County will demonstrate compliance with the applicable EPA standards within 180 days after the MWC unit commences operation.

Please call us if you have any questions about this closure agreement.

Sincerely,



David S. Dee

cc: Susan Churuti
Julie Yard
Pick Talley

Mike Rudd
Russ Menke
Pete Stasia



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PINELLAS COUNTY, FLORIDA

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PINELLAS COUNTY UTILITIES

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PHONE: (813) 464-7565
FAX: (813) 464-7713

December 20, 1996

Mr. Venkata Panchakarla, P.E.
Florida Department of Environmental Protection
Division of Air Resources Management
Mail Station 5500
2600 Blair Stone Road
Tallahassee, FL 32399-4200

RE: Pinellas County
Bridgeway Acres Landfill
Initial Tier 1 NMOC Report

Dear Mr. Panchakarla:

Attached is the initial Tier 1 NMOC calculation for the Bridgeway Acres Landfill located in Pinellas County. Rule 62-204.800, F.A.C., requires the initial design report and NMOC calculations as described in 40 CFR 60.757 be submitted to the Department by December 31, 1996.

The NMOC calculation was completed using the EPA Landfill Air Emissions Estimation Model. Disposal data from the Title V Application and other waste quantity reports were used for the in-place waste mass. The fraction of degradable waste was found to be 68 percent of the waste stream as noted in the Pinellas County MSW Characterization and Analysis conducted from July 1989 to June 1990. The initial Tier 1 NMOC calculation was found to 249 megagrams per year. Computer model results are attached.

Landfill operations began at this site in 1977 and the design capacity for this landfill is 26 million megagrams. Attached is a site map showing landfill areas.



Mr. Venkatta Panchakarla
December 20, 1996
page 2

If there any questions regarding this report, please call Dave Pelham at (813) 282-2404.

Sincerely,

Pinellas County Department of Solid Waste Operations

HDR ENGINEERING, INC.

Michael J. Rudd by Matthew G. ...
Michael J. Rudd
Director of Operations

David M. Pelham
David M. Pelham, P.E. 12-20-96
Project Engineer

Enclosures

cc: P. Stasis - HDR
N. Poteet - HDR
R. Larson - HDR
D. Zell - FDEP
B. PEACOCK - DSWO
B. BUTERA - FDEP
K. FORD - FDEP

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Model Parameters

Lo : 170.00 m³ / Mg ***** User Mode Selection *****
 k : 0.0500 1/yr ***** User Mode Selection *****
 NMOC : 4000.00 ppmv ***** User Mode Selection *****
 Methane : 50.0000 % volume
 Carbon Dioxide : 50.0000 % volume

Landfill Parameters

Year Opened : 1975 Current Year : 2020 Year Closed: 2020
 Capacity : 3000000 Mg
 Average Acceptance Rate Required from
 Current Year to Closure Year : 0.00 Mg/year

Model Results

Year	Refuse In Place (Mg)	NMOC Emission Rate	
		(Mg/yr)	(Cubic m/yr)
1976	1.107E+05	2.698E+01	7.528E+03
1977	1.993E+05	4.726E+01	1.318E+04
1978	2.897E+05	6.699E+01	1.869E+04
1979	3.886E+05	8.784E+01	2.450E+04
1980	5.022E+05	1.112E+02	3.103E+04
1981	6.398E+05	1.394E+02	3.888E+04
1982	8.252E+05	1.777E+02	4.958E+04
1983	1.020E+06	2.165E+02	6.041E+04
1984	1.051E+06	2.136E+02	5.958E+04
1985	1.150E+06	2.272E+02	6.340E+04
1986	1.257E+06	2.424E+02	6.762E+04
1987	1.394E+06	2.639E+02	7.362E+04
1988	1.441E+06	2.625E+02	7.323E+04
1989	1.515E+06	2.676E+02	7.467E+04
1990	1.588E+06	2.724E+02	7.599E+04
1991	1.640E+06	2.718E+02	7.583E+04
1992	1.692E+06	2.713E+02	7.568E+04
1993	1.709E+06	2.622E+02	7.315E+04
1994	1.741E+06	2.571E+02	7.172E+04
1995	1.772E+06	2.520E+02	7.031E+04
1996	1.810E+06	2.492E+02	6.953E+04
1997	1.857E+06	2.485E+02	6.934E+04



February 9, 1998

Mr. Venkata Panchakarla, P.E.
Florida Department of Environmental Protection
Division of Air Resources Management
Mail Station 5500
2600 Blair Stone Road
Tallahassee, Florida 32399-4200

RE: Pinellas County Bridgeway Acres Landfill Tier II Sampling

Dear Mr. Panchakarla:

The Tier II analysis and report for the above-referenced landfill has been completed and is attached for your review. The initial Tier I report was submitted in December, 1996. This report indicated the need to conduct a Tier II analysis. Upon completion of the Tier II sampling and analysis, the actual landfill emission rate is 200 ppm total NMOC (as hexane) based on an arithmetic average of the valid samples collected. This emission rate was remodeled and predicted landfill emissions were reduced substantially below the 50 megagrams per year level. The modeling analysis is provided in Attachment I. The sampling results are presented in Attachment II.

It is inferred from the USEPA requirements that Tier II analyses are to be completed within 180 days of the trigger (Tier I analysis demonstrating exceedance of 50 megagrams per year of NMOC emissions). As discussed in the attached report by Golder Associates, Inc., who conducted the Tier II sampling, meeting this timeframe became impossible. It was necessary to conduct the sampling three separate times at the landfill. Golder Associates originally used Quanterra Environmental Services to analyze the collected samples. The first sample collection resulted in all samples being contaminated with excess nitrogen (N_2). The second sample collection ended with the same result, despite using a field instrument to screen samples. This left the laboratory as highly suspect in contaminating the samples. Golder Associates used Triangle Environmental Services to analyze samples collected the third time. All but one sample collected met the acceptability criteria of the method. Golder Associates sent split samples from the third sample collection to Quanterra Labs as a verification check and again their analyses presented contamination problems. This left no other conclusion but Quanterra Environmental Services somehow contaminated all of the samples they received.

HDR Engineering, Inc.

Employee-owned

Suite 300
5100 W. Kennedy Boulevard
Tampa, Florida
33609-1840

Telephone
813 282-2300
Fax
813 282-2449


RE: Bridgeway Acres Landfill
February 6, 1998
Page 2

Due to these problems, the timely submission of these results has extended past the 180 days inferred in the rule. Actual emissions calculated from the Tier II results show that the Bridgeway Acres Landfill will never achieve 50 megagrams per year of Total NMOC emissions based on USEPA models. We request that you review and accept these values in lieu of further submissions from Pinellas County.

Should you have questions or need additional information, please feel free to contact me at (813) 464-7527 or Michael J. Hober, William E. Corbin, or Donald F. Elias of RTP Environmental Associates, Inc. at (732) 968-9600.

Sincerely,

HDR ENGINEERING, INC.


R. Peter Stasis, P.E.
Vice President

cc: D. Elias M. Rudd B. Ries
M. Hober HDR File
W. Corbin A. Corbo

=====
 Model Parameters
 =====

Lo : 169.90 m³ / Mg **** User Mode Selection ****
 k : 0.0500 1/yr **** User Mode Selection ****
 NMOC : 200.00 ppmv **** User Mode Selection ****
 Methane : 50.0000 % volume
 Carbon Dioxide : 50.0000 % volume

=====
 Landfill Parameters
 =====

Year Opened : 1975 Current Year : 1998 Year Closed: 2020
 Capacity : 3000000 Mg
 Average Acceptance Rate Required from
 Current Year to Closure Year : 49818.18 Mg/year

=====
 Model Results
 =====

Year	Refuse In Place (Mg)	NMOC Emission Rate	
		(Mg/yr)	(Cubic m/yr)
1976	1.107E+05	1.348E+00	3.762E+02
1977	1.993E+05	2.362E+00	6.589E+02
1978	2.897E+05	3.348E+00	9.339E+02
1979	3.886E+05	4.389E+00	1.224E+03
1980	5.022E+05	5.559E+00	1.551E+03
1981	6.398E+05	6.963E+00	1.943E+03
1982	8.252E+05	8.882E+00	2.478E+03
1983	1.020E+06	1.082E+01	3.019E+03
1984	1.051E+06	1.067E+01	2.977E+03
1985	1.150E+06	1.136E+01	3.168E+03
1986	1.257E+06	1.211E+01	3.377E+03
1987	1.394E+06	1.318E+01	3.678E+03
1988	1.441E+06	1.311E+01	3.659E+03
1989	1.515E+06	1.338E+01	3.732E+03
1990	1.588E+06	1.361E+01	3.798E+03
1991	1.640E+06	1.358E+01	3.789E+03
1992	1.692E+06	1.355E+01	3.781E+03
1993	1.709E+06	1.310E+01	3.654E+03
1994	1.741E+06	1.285E+01	3.585E+03
1995	1.772E+06	1.260E+01	3.515E+03
1996	1.810E+06	1.245E+01	3.473E+03
1997	1.857E+06	1.241E+01	3.463E+03
1998	1.904E+06	1.238E+01	3.454E+03
1999	1.954E+06	1.238E+01	3.455E+03
2000	2.004E+06	1.239E+01	3.456E+03
2001	2.053E+06	1.239E+01	3.457E+03
2002	2.103E+06	1.239E+01	3.457E+03
2003	2.153E+06	1.239E+01	3.458E+03
2004	2.203E+06	1.240E+01	3.459E+03
2005	2.253E+06	1.240E+01	3.459E+03

PINELLAS COUNTY LANDFILLING OPERATIONS

As noted in the permit application forms, Pinellas County owns a landfill complex adjacent to the Pinellas County Resource Recovery Facility (PCRRF). Since the landfilling operations have the same SIC code, owner, and are contiguous to the PCRRF, the RRF and landfill are considered the same facility for Title V purposes.

Landfill areas are shown on the figure given as Attachment 2 to the Title V permit application. The active landfill area used primarily since 1983 is south of the PCRRF. There are inactive C&D and Class I (Windisch and Old Wells Bros.) and closed Class I (Toytown) landfill areas that have not been used for over 10 years. No significant VOC emissions from the C&D landfill areas are expected. Since reliable information is not available for the inactive Class I landfill areas (Windisch and Old Wells Bros. inactive since the 1970s) or closed landfill areas (Toytown closed in 1983) and these landfill areas are not subject to the Emission Guideline (EG) requirements in Subpart Cc, these landfill areas were not considered further. Pinellas County landfills MWC ash and some municipal solid waste at the Bridgeway Acres landfill. Only the present landfilling operations are subject to EG requirements.

Since submittal of the initial Title V application, the state regulations at FAC 62-204.800(8) have been revised to include the Municipal Waste Landfill (MWL) EGs at 40 CFR 60 Subpart Cc. MWL EGs were published in the March 12, 1996 Federal Register (61 FR 9919). The State plan for MWL EGs has not yet been approved by EPA, but formal EPA approval is expected prior to promulgation of Federal Plan requirements.

As required under State rule requirements in FAC 62-204.800(8)(c), Pinellas County submitted a design capacity report and initial NMOC emissions estimate in December 1996. Pinellas County submitted a Tier II analysis in February 1998 showing landfill emissions had NMOC concentrations of 200 ppm_{dv} (as hexane) and total landfill emissions would be less than 50 Megagrams per year (Mg/yr) for the foreseeable future. Therefore, collection and control of landfill gas will not be required for the Pinellas County landfill. The Tier I and Tier II submittals are contained in Attachment 8. Attached herein is a copy of the latest annual emissions estimate for the landfill.

Department of Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

ANNUAL OPERATING REPORT FOR AIR POLLUTANT EMITTING FACILITY

See Instructions for Form No. 62-210.900(5).

I. FACILITY REPORT

A. REPORT INFORMATION

1. Year of Report 1998	2. Number of Emissions Units in Report 1
-------------------------------	---

B. FACILITY INFORMATION

1. Facility ID 1030241	2. Facility Status ACTIVE	3. Date of Permanent Facility Shutdown
4. Facility Owner/Company Name PINELLAS CO. BOARD OF COUNTY COMMISSIONERS		
5. Site Name PINELLAS CO. BRIDGEWAY ACRES LANDFILL		
6. Facility Location Street Address or Other Locator: 3095 - 114TH AVE. N. City: ST.PETERSBURG, FL County: PINELLAS Zip Code: 33716		
7. Facility Compliance Tracking Code A	8. Governmental Facility Code 3	9. Facility SIC(s) 4953
10. Facility Comment This AOR is being submitted for operations at the Pinellas Co. Bridgeway Acres Landfill only. An AOR for the contiguous Pinellas Co. Resource Recovery Facility (same SIC Code) is submitted separately.		

C. FACILITY HISTORY INFORMATION

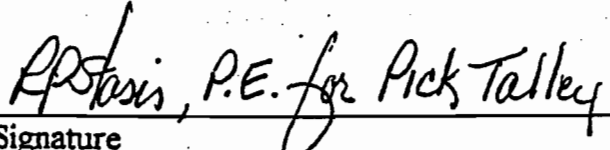
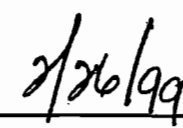
1. Change in Facility Owner/ Company Name During Year? No	2. Date of Change
--	-------------------

Facility ID: 1030241

D. OWNER/CONTACT INFORMATION

1. Owner or Authorized Representative	
Name and Title PICK TALLEY, DIRECTOR OF UTILITIES	
Mailing Address Organization/Firm: PINELLAS CO. UTILITIES ADMINISTRATION Street Address: 14 S. FORT HARRISON AVE., 5TH FL. City: CLEARWATER State: FL Zip Code: 33756	
Telephone: (727) 464 - 3438	Fax: (727) 464 - 3944
2. Facility Contact	
Name and Title WARREN SMITH, DIRECTOR, PINELLAS CO. DEPT. OF SOLID WASTE OPERATIONS	
Mailing Address Organization/Firm: PINELLAS CO. DEPT. OF SOLID WASTE OPERATIONS Street Address: 3095 - 114TH AVE. N. City: ST.PETERSBURG State: FL Zip Code: 33716	
Telephone: (727) 464 - 7565	Fax: (727) 464 - 7712

E. OWNER OR AUTHORIZED REPRESENTATIVE STATEMENT

I hereby certify that the information given in this report is correct to the best of my knowledge.	
 Signature	 Date

II. EMISSIONS UNIT REPORT

A. EMISSIONS UNIT INFORMATION

1. Emissions Unit Description LANDFILL		
2. Emissions Unit ID 001	3. Emissions Unit Classification Regulated Emissions Unit	4. Operated During Year? Y
5. DEP Permit or PPS Number	6. Emissions Unit Status ACTIVE	7. Ozone SIP Base Year Emissions Unit? Y
8. Emissions Unit Startup Date	9. Long-term Reserve Shutdown Date	10. Permanent Shutdown Date

B. EMISSION POINT/CONTROL INFORMATION

1. Emissions Point Type 4 - NO TRUE EMISSION POINT (FUGITIVE EMISSION)
2a. Description of Control Equipment 'a'
2b. Description of Control Equipment 'b'

C. EMISSIONS UNIT OPERATING SCHEDULE INFORMATION

1. Average Annual Operation 24 hours/day 7 days/week	2. Total Operation During Year (hours/year) 8760
3. Percent Hours of Operation by Season DJF: 25 MAM: 25 JJA: 25 SON: 25	
4. Average Ozone Season Operation (June 1 to August 31) 24 hours/day 7 days/week	5. Total Operation During Ozone Season (days/season) 92

D. EMISSIONS UNIT COMMENT

**PINELLAS COUNTY BRIDGEWAY ACRES LANDFILL
EMISSIONS CALCULATIONS**

Landfill operations normally take place only during daylight hours. However, since fugitive VOC emissions will occur continuously, unlimited operations (i.e., 8760 hours/year) are assumed.

VOC EMISSIONS:

Volatile Organic Compound (VOC) emissions, also called Non-Methane Organic Compound (NMOC) emissions, for landfills were calculated with the EPA Landfill Emissions Model (LEM, version 2.01). Model inputs are the amount of degradable municipal solid waste (MSW) materials landfilled by year in Megagrams (Mg) since the landfill was opened (see attached table), the methane generation rate (k , in yr^{-1}), the methane generation potential (L_0 , in m^3 of methane per Mg of MSW), and the NMOC concentration (in ppmv as hexane). A site-specific study was conducted in 1997 at the Bridgeway Acres landfill to determine the NMOC concentration in accordance with Tier 2 procedures as required by the landfill Emissions Guidelines. This study showed average NMOC concentrations of about 200 ppmv. Using the NSPS/EG values of $k=0.05 \text{ yr}^{-1}$ and $L_0=170 \text{ m}^3/\text{Mg}$ gives 1998 NMOC emissions of 12.69 Mg/yr as noted on the attached table. Thus, based on the LEM, the following VOC emissions for 1998 are:

$$\begin{aligned} 12.69 \text{ Mg/year} \times 1.1023 \text{ tons/Mg} &= 14.0 \text{ tons/year} \\ 14.0 \text{ tons/year} \times 2000 \text{ lbs/ton} / 365 \text{ days/year} &= 76.7 \text{ lb/day} \end{aligned}$$

It is not possible to estimate VOC or NMOC emissions for the SCC units indicated on the form of "Acres of Landfill" since these emissions depend on the mass of refuse landfilled, the elapsed time, and other factors which are not related to the landfill surface area.. The 1998 landfill emissions are being reported to comply with the Emissions Guidelines reporting requirements at 40 CFR 60.35c, 40 CFR 60.757(b), and FAC 62-204.800(8)(c)5.

E. EMISSIONS INFORMATION BY PROCESS/FUEL

(1) PROCESS/FUEL INFORMATION

1. SCC 5-02-006-02	2. Description of Process or Type of Fuel Waste Disposal Landfill Dump Solid Waste Disposal-Commercial/In Municipal: Fugitive Emission	
3. Annual Process or Fuel Usage Rate N/A	4. Ozone Season Daily Process or Fuel Usage Rate N/A	5. SCC Unit Acres of Landfill
6. Fuel Average % Sulfur	7. Fuel Average % Ash	8. Fuel Heat Content (mmBtu/SCC Unit)

(2) EMISSIONS INFORMATION

1a. Pollutant VOC CAS No. [] Below Threshold Volatile Organic Compounds [] Not Emitted		
2a. Annual Emissions (ton/year) 14.0	3a. Ozone Season Daily Emissions (lb/day) 76.7	4a. Emissions Method Code 3
5a. Emissions Calculation (Show separately both annual and daily emissions calculations) see previous page		
1b. Pollutant CAS No. [] Below Threshold [] Not Emitted		
2b. Annual Emissions (ton/year)	3b. Ozone Season Daily Emissions (lb/day)	4b. Emissions Method Code
5b. Emissions Calculation (Show separately both annual and daily emissions calculations)		

=====
 Model Parameters
 =====

Lo : 170.00 m³ / Mg
 k : 0.0500 1/yr
 NMOC : 200.00 ppmv
 Methane : 50.0000 % volume
 Carbon Dioxide : 50.0000 % volume

=====
 Landfill Parameters
 =====

Landfill type : No Co-Disposal
 Year Opened : 1975 Current Year : 1999 Closure Year:
 Capacity : 2036000 Mg
 Average Acceptance Rate Required from
 Current Year to Closure Year : 0.00 Mg/year

=====
 Model Results
 =====

Year	Refuse In Place (Mg)	NMOC Emission Rate	
		(Mg/yr)	(Cubic m/yr)
1976	1.107E+05	1.349E+00	3.764E+02
1977	1.993E+05	2.363E+00	6.593E+02
1978	2.898E+05	3.351E+00	9.348E+02
1979	3.887E+05	4.393E+00	1.225E+03
1980	5.023E+05	5.563E+00	1.552E+03
1981	6.400E+05	6.970E+00	1.944E+03
1982	8.253E+05	8.888E+00	2.480E+03
1983	1.020E+06	1.083E+01	3.021E+03
1984	1.062E+06	1.081E+01	3.016E+03
1985	1.160E+06	1.148E+01	3.202E+03
1986	1.268E+06	1.223E+01	3.413E+03
1987	1.405E+06	1.331E+01	3.713E+03
1988	1.452E+06	1.323E+01	3.691E+03
1989	1.526E+06	1.349E+01	3.763E+03
1990	1.599E+06	1.372E+01	3.828E+03
1991	1.651E+06	1.368E+01	3.818E+03
1992	1.703E+06	1.365E+01	3.808E+03
1993	1.720E+06	1.319E+01	3.680E+03
1994	1.752E+06	1.294E+01	3.610E+03
1995	1.783E+06	1.269E+01	3.539E+03
1996	1.822E+06	1.254E+01	3.499E+03
1997	1.860E+06	1.239E+01	3.458E+03
1998	1.934E+06	1.269E+01	3.541E+03
1999	2.036E+06	1.332E+01	3.715E+03

**DESCRIPTION OF CONTROL EQUIPMENT
FOR MWC UNITS 1 THROUGH 3**

Units 1 and 2 of the Pinellas County Resource Recovery Facility (PCRRF) presently utilize Electrostatic Precipitators (ESPs) for the control of particulate emissions. Each Municipal Waste Combustor (MWCs) is equipped with its own dedicated ESP. Because of the large volumetric flow rates involved, the ESPs have two identical sides. Each side consists of a three-field ESP. The manufacturer, model and serial numbers of the ESPs are given below. The ESPs are identical for MWC units 1 and 2.

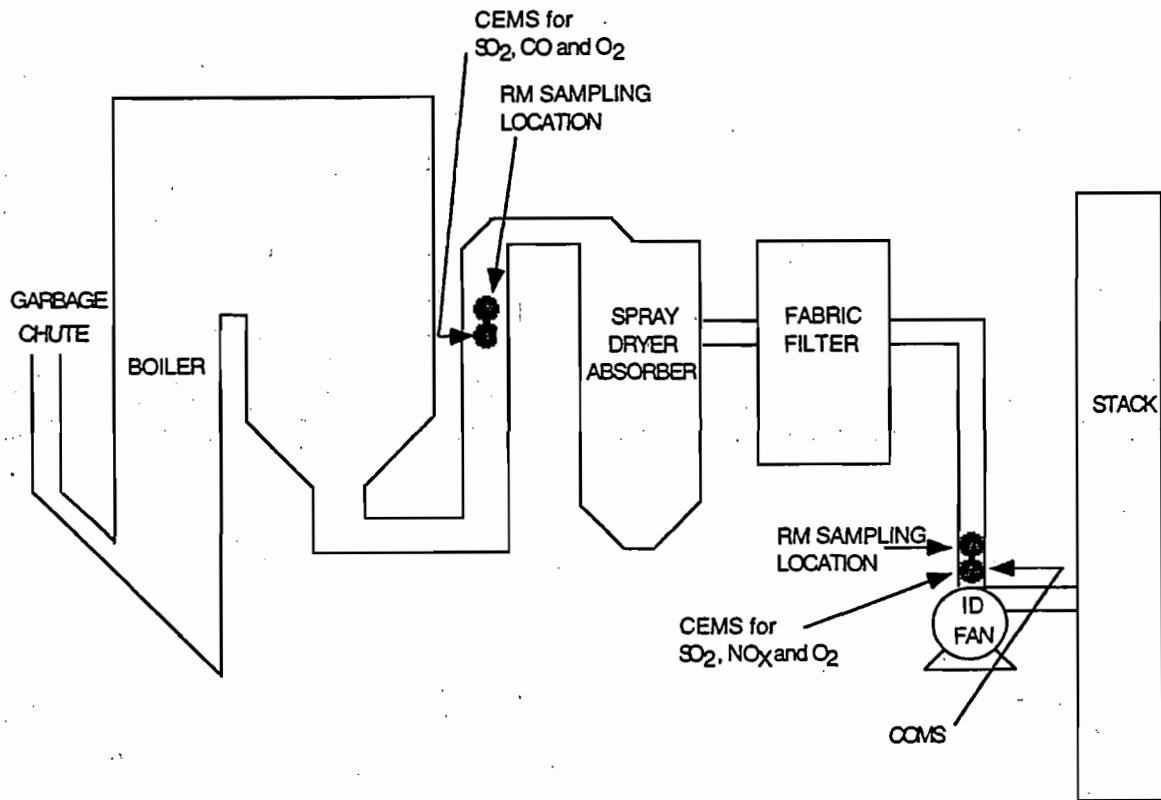
Manufacturer: Air Correction Division of UOP Inc. Model Number: 3636-3.28-2
 Cleaning Method: Gravity impact rappers Serial Numbers: F-101, F-102

For unit 3, the ESPs have been replaced with spray dry absorbers/fabric filters/carbon injection/SNCR controls based on the requirements of the MWC Emission Guidelines. Specifications for the unit 3 control systems are given below:

	<u>Spray-dry Absorber</u>	<u>Fabric Filter</u>	<u>SNCR System</u>	<u>Carbon Injection</u>
Manuf.:	WAPC ^a	WAPC	WAPC	WAPC
Model No:	510500SDA	531503FIL	500505NOXX	500504CRBN

^aWAPC = Wheelabrator Air Pollution Control

PROCESS FLOW DIAGRAM
AIR FLOW SCHEMATIC FOR RETROFIT UNITS^a

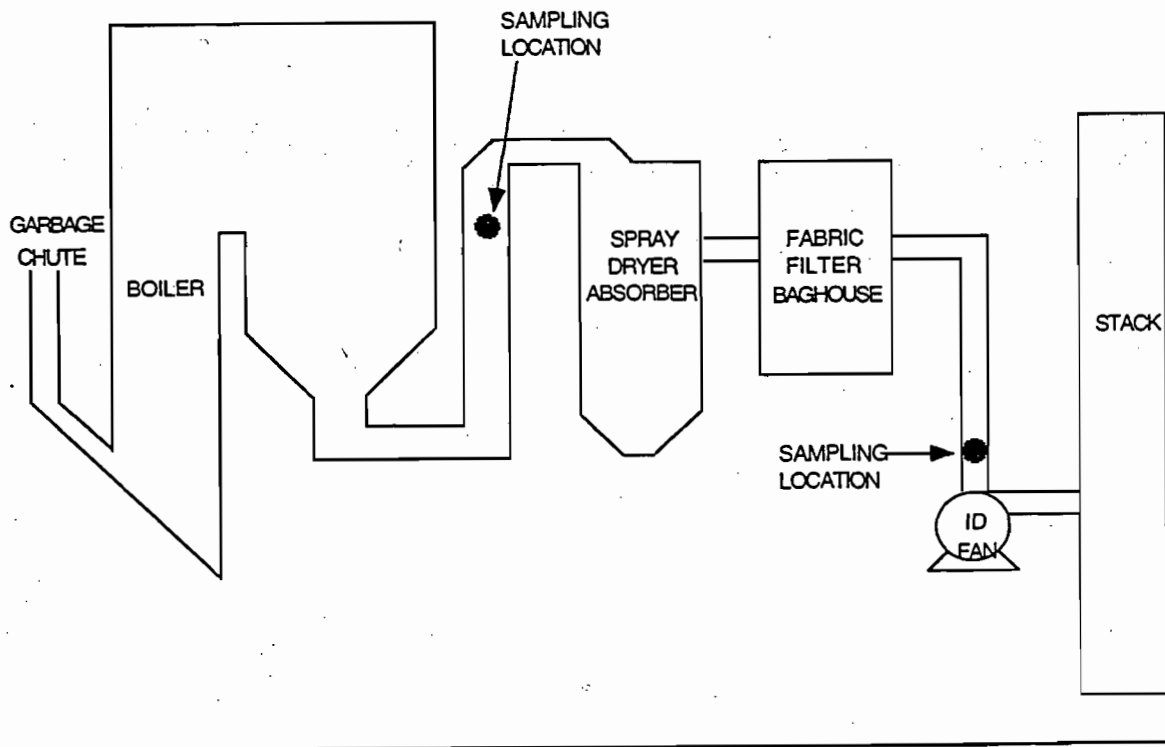


Process Flow Diagram and CEM locations

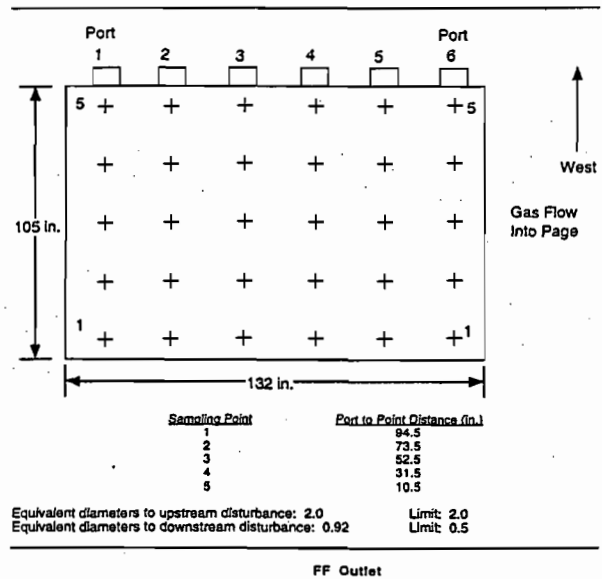
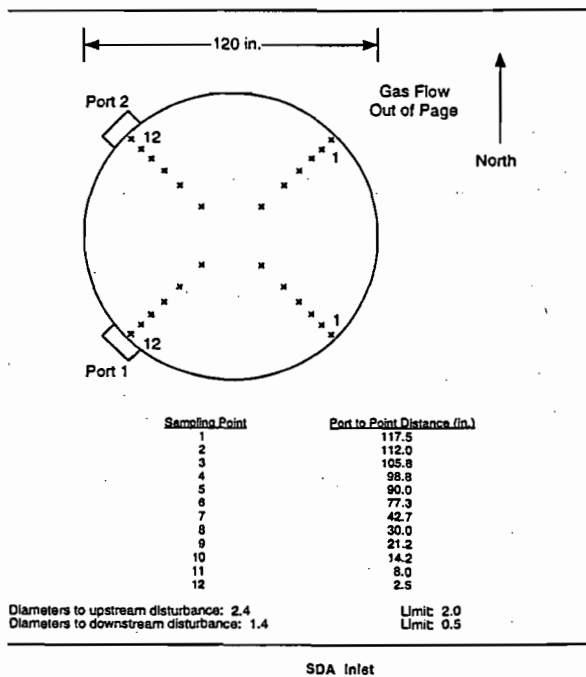
^aAt present, only unit #3 has been retrofit for the EG requirements.

Source: Clean Air Engineering, Report on Initial CEMS and CCMS Performance Evaluations, January 19, 1999.

**DESCRIPTION OF STACK SAMPLING FACILITIES
FOR RETROFIT MWC UNITS^a**



Process Schematic



^aAt present, only unit #3 has been retrofit for the EG requirements.

Source: Clean Air Engineering, Report on Initial Compliance Testing, Vol. I, January 14, 1999.

ATTACHMENT 19
APPLICABLE REQUIREMENTS - RESOURCE RECOVERY FACILITY

Final Order Modifying Conditions of Certification - July 28, 1986
USEPA Final Determination and PSD Permit Conditions - May 22, 1987
PSD Permit Amendment PSD-FL-011(A), PSD-FL-098(A) - October 10, 1995
Corrected Final Order Modifying Conditions of Certification - July 25, 1996
Final Order Modifying Conditions of Certification - May 19, 1998

permits

TAB

BEST AVAILABLE COPY

IN RE:)
)
PINELLAS COUNTY RESOURCE)
RECOVERY FACILITY)
MODIFICATION OF TERMS AND)
CONDITIONS OF CERTIFICATION)
NO. PA 83-18)
PINELLAS COUNTY, FLORIDA)

FILE COPY
PINELLAS EOR

File No. 3.2.2
OGC FILE NO: 85-0470

FINAL ORDER MODIFYING
CONDITIONS OF CERTIFICATION

The Florida Department of Environmental Regulation, after notice and opportunity for hearing, modifies the conditions of certification for the Pinellas County Resource Recovery Facility pursuant to Section 403.516(1), Florida Statutes, and Section VII of the Conditions of Certification, which delegated modifications of emission limitation conditions to the Department.

1. On August 17, 1984, and May 8, 1985, Pinellas County submitted letters to the Department requesting modification of the existing Conditions of Certification for its Resource Recovery Facility to amend emission limitations and compliance monitoring.

2. After review of the request and existing data, the Department proposed to grant relief to Pinellas County by making the following modifications to the conditions of certification.

A. Condition XIV.A.1. shall be changed to read:

1. Emission Limitations upon Operation of Unit 3

a. Stack emissions from each-unit Units 1 or 2 shall not exceed the following:

decomposing what 1, 2 always were ADI: PDD

(1) Particulate matter: in grains per standard cubic foot dry gas corrected to 12% CO₂ - 0.08.

(2) SO₂-170 lbs/hr each unit

(3) Odor: there shall be no objectionable odor

(4) Visible emissions: stack opacity shall be no greater than 20% except as provided for during start-up, shutdown, or malfunctions when the provisions of 17-2.250, FAC, shall apply

b. Emissions from Unit 3 shall not exceed the following:

(1) Particulate matter: in grains per standard cubic foot dry gas corrected to 12% CO₂ - 0.03.

(2) SO₂-170 lbs/hr

(3) Nitrogen oxides - 254 lbs/hr

(4) Carbon monoxide - 66 lbs/hr

(5) Lead - 4.4 lbs/hr

(6) Mercury - 3200 grams/day when more than 2205 lbs/day of municipal sludge is fired. Compliance shall be determined in accordance with 40 CFR 6.1, Method 101, Appendix B

(7) Odor - there shall be no objectionable odor

(8) Visible emissions - stack opacity shall be no greater than 20% except as provided for during start-up, shutdown or malfunctions when the provisions of 17-2.250, FAC, shall apply.

b. c. The height of the boiler exhaust stack shall be less than 161 feet above grade.

c. d. The incinerator boilers shall not be loaded in excess of their rated capacity of 87,500 pounds of municipal solid waste per hour each.

FILE COPY
PINELLAS EOR

File No. _____

3.2.2

Final Determination
and Permit Conditions

Pinellas County Resource Recovery Facility Unit 3

Pinellas County, Florida

PSD-FL-098

Prevention of Significant Deterioration

(40 CFR 52.21)

May 22, 1987

Tat

CONTENTS

- I. Introduction
- II. Rule Applicability
- III. PSD Applicability Determination
- IV. Best Available Control Technology Determination
- V. Air Quality Analysis
- VI. Additional Impact Analysis
- VII. Final Permit Conditions
- VIII. Public Comments/Notice

I. INTRODUCTION

Pursuant to Section 403.505, Florida Statutes, Pinellas County, applied to the Florida Department of Environmental Regulation (DER) in August 1983 for certification of a steam electric generating, solid waste energy recovery facility at a site about one mile east of the town of Pinellas on the County's existing Bridgeway Acres Landfill tract. After a thorough review by DER, including public hearings, the Florida Power Plant Siting Board issued a site certification to the County. At the time of the County's application, FDER believed that such a site certification constituted a legal prevention of significant deterioration (PSD) permit under Chapter 17-2.500 of the Florida air pollution regulations which had been approved by the U.S. Environmental Protection Agency (EPA) on December 22, 1983. In the summer of 1985, EPA became aware that the Florida Electrical Power Plant Siting Act (PPSA), under which the site certification was issued, restricts the authority of the State of Florida to implement any regulation (i.e., PSD Regulations) pertaining to power plants other than those in the Act. Consequently, EPA determined that the Florida PSD regulations were superseded by the PPSA, and that the PPSA could not legally be approved by EPA as part of the State Implementation Plan (SIP) since it did not comply with EPA PSD regulations both procedurally and substantively. Thus, EPA concluded that the proposed Pinellas County Resource Recovery Facility (RRF) could not be issued a valid PSD permit by FDER. Nor could the PPSA certification substitute for a valid PSD permit. EPA subsequently remanded PSD authority for sources subject to the PPSA while delegating responsibility for the technical and administrative portions of the PSD review to the FDER.

On December 13, 1985, Pinellas County applied to DER for a PSD permit. In conducting the PSD review, EPA decided that, due to the unique circumstances of this permit application, the Best Available Control Technology (BACT) analysis would be conducted taking into account the factors affecting BACT at the time the County submitted a complete application for a site certification. The following final determination and permit constitute EPA's final action as well as the culmination of those activities delegated to the FDER by EPA.

The project constitutes the third incinerator at this resource recovery facility and uses up to 1050 tons per day (TPD) of refuse as fuel. The boiler expansion increases the total solid waste processing capacity of the facility to 3150 TPD. The steam from the new boiler is sent to a turbine generator with a capacity of 29 megawatts (MW) (gross). Pinellas County contracted with a full service vendor to design, construct, and operate the plant for 20 years. Generated electricity is transmitted to the Florida Power Corporation (FPC) Gandy Substation for distribution over the FPC transmission system. The generating capacity of the expanded plant is approximately 79.9 MW.

II. RULE APPLICABILITY

The proposed site of the Pinellas County RRF is located within a non-attainment area for ozone. This designation requires that all proposed new sources which would emit greater than 100 tons per year (TPY) of volatile organic compound (VOC) undergo a nonattainment review. As the proposed incineration facility is projected to emit less than 100 TPY of VOC, the proposed source is not subject to a nonattainment review. In addition, the source is within 25 kilometers of the Pinellas County sulfur dioxide non-attainment area and within 15 kilometers of the particulate nonattainment area in Tampa. Modeling demonstrates that this source will have an insignificant impact on these areas and is not subject to review requirements for sources impacting on nonattainment areas.

The source is subject to the regulations for PSD of air quality under 40 CFR §52.21 regarding the assessment of source emissions in attainment or unclassified areas. Since this source is within the category of stationary sources listed under the PSD regulations which specifies the threshold of emissions for PSD applicability as 100 TPY or greater for any regulated pollutant, the source must provide a BACT determination, an ambient air quality analysis, a source impact analysis and an additional impact analysis (soils, vegetation, visibility) for each pollutant emitted in significant amounts. These include: particulate matter (PM), sulfur dioxide (SO₂), carbon monoxide (CO), nitrogen oxides (NO_x), lead (Pb), mercury (Hg), and fluorides (as hydrogen fluoride, HF). In addition to the above, a Class I area impact analysis is required because the source is to be located within 100 kilometers of the Chassahowitzka National Wilderness area.

New Source Performance Standards (NSPS) for incinerators under 40 CFR 60, Subpart E, apply to this new unit. This NSPS sets emission standards for incinerators capable of charging more than 50 tons per day of municipal solid waste and limits the maximum amount of PM which may be emitted from any facility subject to this regulation. NSPS for boilers under 40 CFR 60, Subpart Db does not apply to this new unit since construction on the unit commenced prior to June 19, 1984.

III. PSD APPLICABILITY DETERMINATION

Title 40 Code of Federal Regulations, Section 52.21, requires that each pollutant subject to PSD review must be controlled by BACT. Seven pollutants are subject to BACT. The BACT emission limits proposed are summarized as follows:

<u>Pollutant</u>	<u>BACT EMISSION LIMITS</u>
Particulate Matter	0.030 gr/dscf (corrected to 12% CO ₂) (1)
Sulfur Dioxide	170.0 lbs/hr
Nitrogen Oxides	254.0 lbs/hr
Carbon Monoxide	66.0 lbs/hr
Lead	2.80 lbs/hr
Mercury	0.294 lbs/hr (2)
Fluorides	8.31 lbs/hr

Based upon these air pollutant emission limits, the calculated total annual tonnage of regulated air pollutant emitted from the units to the atmosphere is listed as follows:

<u>Pollutant</u>	<u>Maximum Annual Emissions (tons/year)</u>	<u>PSD Significant Emissions Rate (tons/year)</u>
Particulate (PM)	109	25
Sulfur Dioxide (SO ₂)	745	40
Nitrogen Dioxide (NO)	1112	40
Carbon Monoxide (CO)	289	100
Lead (Pb)	12.3	0.6
Mercury (Hg)	1.29	0.1
Fluorides (F)	36.4	3
Beryllium (Be)	0.000394 (3)	0.0004

- (1) As discussed in the BACT determination (page 4), EPA will set an initial particulate emissions limit of 0.03 gr/dscf. Within 24 months of startup of operation, the County shall submit compliance tests that will be used to determine if a new particulate emission limit is warranted. The limit will be determined by observed average emission rate (\bar{x}) from the submitted compliance tests and will be statistically analyzed using the one tailed student T test ($t_{.05} = (\bar{x} - u) n^{0.5}/s$) at the 95% confidence level to derive a mean emission rate (u), where s is the standard deviation of observed values n . The final operating particulate emissions limit shall be this mean emission rate (u). This limit shall be restricted to no more than 0.030 grains per dry standard cubic foot (corrected to 12% CO₂) or no less than 0.020 grains per dry standard cubic foot (corrected to 12% CO₂).
- (2) When more than 2205 lbs/day of municipal sludge is fired.
- (3) An emission limitation is included in the permit to limit these emissions to below the PSD significant emissions rate.

IV. BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)

A. Particulate Matter

NSPS for incinerators limit particulate emissions from this unit to 0.08 grains per dry standard cubic foot (gr/dscf) based on a 12% flue gas concentration of carbon dioxide. However, BACT clearinghouse reports incinerators emission limits to be from 0.01 to 0.03 gr/dscf.

In performing the BACT determination, EPA decided to take into account what BACT would have been in 1983 due to the time elapsed from the commencement of construction authorized under Florida rule and the application for a federally enforceable PSD permit. EPA will set an initial particulate emissions limit of 0.03 gr/dscf. Within 24 months of startup of operation, EPA will evaluate emissions testing data at the facility and determine if a change in the allowable emission rate is warranted. A permit provision was added which will allow EPA to determine a more stringent limit should emissions testing reveal that the unit is capable of achieving a better control efficiency. The more stringent limit, as proposed by EPA, will be no lower than 0.02 gr/dscf and should be achievable on a continuous basis without an increase in capital costs.

B. Sulfur Dioxide

The emissions of sulfur dioxide from municipal solid waste incinerators depends on three factors. These factors are: the sulfur content of the waste, the conversion of organic and inorganic sulfur compounds to sulfur dioxide, and the retention of the sulfur dioxide in the ash. Emission test data for a multitude of solid waste combustion facilities is contained in the California Air Resources Board Report. These data indicate that emissions of SO₂ from these facilities range from 0.4 to 7.2 pounds of SO₂ per ton of solid waste fired. The proposed emission limit of 170 pounds per hour, equivalent to 3.9 pounds of SO₂ per ton of solid waste fired, is in the middle of this expected range and is determined to be BACT for this source. (It should be noted that acid gas controls were not considered to be BACT for SO₂ emissions at the time of the application (1983).)

C. Nitrogen Oxides

During combustion of municipal solid waste, NO_x is formed in high temperature zones in and around the furnace flame by the oxidation of atmospheric nitrogen and nitrogen in the waste. The two primary variables that affect the formation of NO_x are the temperature and the concentration of oxygen. Techniques such as the method of fuel firing to provide correct distribution of combustion air between overfire and underfire air, exhaust gas recirculation, and decreased heat release rates have been used to reduce NO_x emissions. A few add-on control techniques such as catalytic reduction with ammonia and thermal de-NO_x are still experimental, and are not considered to be demonstrated technology for the proposed project.

The proposed unit will use propriety grate and combustion controls to limit NO_x emissions at 254 pounds per hour. This level of control is judged to represent BACT.

D. Carbon Monoxide

Carbon monoxide is a product of incomplete combustion where there is insufficient air. Incomplete combustion will also result in the emissions of solid carbon particulates in the form of smoke or soot and unburned and/or partially oxidized hydrocarbons. The applicant proposes that BACT is a properly designed grate and combustion control system to ensure sufficient mixing of the MSW and air so that the emissions of carbon monoxide are minimized. The proposed CO emission rate is 66 pounds per hour. EPA agrees with the proposal and has judged this emission rate to be BACT for carbon monoxide emissions.

E. Lead

With respect to lead emissions, two conditions are needed to achieve high removal efficiencies of metallic compounds emitted at refuse burning facilities: (1) operation of particulate matter control equipment at temperatures below 500°F, and (2) consistently efficient removal of submicron fly ash particles. The maximum temperature of the incinerator combustion gases at the inlet to the particulate control device is estimated to be below 500°F. The particulate control equipment would be capable of removing the lead emissions from the flue gas stream at this temperature.

The emission limit judged to be reasonable for lead is based on test results at similar facilities and the degree of emission control that will be provided by the control equipment which has been determined to be BACT for particulate matter at this facility. In accordance with data contained in the California Air Resources Board (CARB) report on resource recovery facilities, the high concentration of lead in MSW is 0.032 lbs/mm Btu. Based on the control efficiency reported for lead emissions using the required BACT, for particulate matter an emission limitation of 2.80 lbs/hr is judged to be BACT.

F. Mercury

The mercury emission limit determined as BACT is equal to the National Emission Standard for Hazardous Air Pollutant (NESHAP), 40 CFR § 61.50, Subpart E, for municipal wastewater sludge incineration plants. The provisions of this subpart, however, do not apply because no grease, scum, grit screenings or sewage sludge will be incinerated in the proposed incinerator. According to the report "Air Pollution Control at Resource Recovery Facilities" issued by the CARB, the "high" mercury content of municipal solid waste is 8.4×10^{-4} pounds per million Btu. The applicant has proposed an emission limit of 3200 gram/day when more than 2205 lbs/day of municipal sludge is fired. EPA has determined that an emission rate of 0.294 lbs/hr (3200 grams/day) is BACT for this facility.

G. Fluorides

The incineration of fluorine containing wastes results in the emissions of both particulate fluoride and gaseous fluoride (as hydrogen fluoride) emissions. Emission tests have reported fluoride emissions to be from 0.0002 to 0.2 lbs/ton MSW. The applicant has requested the upper limit as an emissions limit for this pollutant. EPA has determined that this request is justified as no control for this pollutant has been installed at this facility nor will it be required. The BACT emission rate has been determined to be 8.31 lbs/hr.

V. Air Quality Analysis

The air quality impact from the proposed emissions has been analyzed. Atmospheric dispersion modeling has been completed and used in conjunction with an analysis of existing air quality data to determine maximum ground-level ambient concentrations of the pollutants subject to BACT. Based on these analyses, EPA has reasonable assurance that the proposed solid waste recovery facility in Pinellas County, subject to these BACT emission limitations, will not cause or contribute to a violation of any PSD increment or ambient air quality standard.

A. Modeling Methodology

Two EPA-approved dispersion models, the Single Source CRSTER model and the Industrial Source Complex Short-term (ISCST) model, were used in the air quality impact analysis. Both of these models predict ground-level concentrations of emissions of gaseous pollutants or small particles from a source through the use of a Gaussian distribution algorithm. The CRSTER model, which is confined by the collocation of all point sources, was used to identify the critical years of meteorology. The ISCST model, which allows for separation of sources and several other features, such as the inclusion of building wake downwash, was used to refine the analysis.

The surface and upper air meteorological data used in these models were National Weather Service data collected at Tampa, Florida, during the period 1970-1974. Since five years of data were used, the highest, second-highest short-term predicted concentrations were used for comparison against the appropriate ambient standard of PSD increment.

The stack parameters and emission rates used in evaluating the ambient impacts are contained in Table V-1 and Table V-2, respectively. Only for the pollutants SO₂ and PM were all the sources evaluated. Total ambient air quality impacts were based on the modeled impacts plus the monitored "background" concentrations.

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TABLE V-1
PINELLAS COUNTY RESOURCE RECOVERY PROJECT
SOURCE PARAMETERS USED IN MODELING

Source	UTM-E (km)	UTM-N (km)	Stack Height (m)	Exit Temperature (K)	Exit Velocity (m/s)	Stack Diamet (m)
RRF Unit 3	335.2	3084.1	49.1	505	26.8	2.37
RRF Units 1-2	335.2	3084.1	49.1	505	26.8	2.37
McKay Bay RRF	360.0	3091.9	45.7	500	21.3	1.91
TECO Big Bend	361.9	3075.0	149.4	426	15.6	7.00
FPC Bartow	342.4	3082.7	91.4	408	44.0	3.35
FPC Higgins	336.5	3098.5	53.0	422	10.4	3.81
Anclote Unit 1	324.9	3119.0	152.1	416	50.0	3.66
Anclote Unit 2	324.9	3119.0	152.1	416	28.3	3.66
Hooker Pts. Unit 1,2	360.0	3087.5	61.0	427	8.1	4.30
Hooker Pts. Unit 3,5	360.0	3087.5	93.3	400	26.9	3.20
Hooker Pts. Unit 4	360.0	3087.5	93.3	438	42.4	2.90
Hooker Pts. Unit 6	360.0	3087.5	93.3	417	23.4	5.40
TECO Gannon Units 1-5	385.0	3091.0	85.3	403	9.2	3.43
TECO Gannon Unit 6	385.0	3091.0	85.3	403	18.0	2.87

2.37

B. Analysis of Existing Air Quality

Preconstruction ambient air quality monitoring may be required for all pollutants subject to PSD review. In general, one year of quality assured data using an EPA-reference, or the equivalent, monitor must be submitted. Sometimes less than one year of data, but no less than four months, may be accepted when EPA approval is given. An exemption to this requirement can be obtained if the maximum air quality impact, as determined through modeling, is less than a pollutant-specific de minimus concentration. In addition, if current monitoring data already exist and these data are representative of the proposed source's area, then, at the discretion of EPA, these data may be used.

The predicted maximum air quality impacts of the proposed project (Unit 3) for each of the seven pollutants subject to review are given in Table V-3 along with the monitoring de minimus levels. From the table it is seen that PM, NO_x, CO, and Hg have maximum air impacts less than the de minimus level; therefore, no preconstruction monitoring is required. Sufficient data in the area of the source already exist for SO₂ and Pb to define existing air quality for these pollutants. Two continuous SO₂ monitors are located in the vicinity of the proposed project. The first, located at site 3620-002, is a special purpose monitoring (SPM) station with the objective of monitoring emissions from the RRF. It is located 1.8 kilometers from the facility and was placed at that location as part of the post construction monitoring requirements associated with the operation of Units 1 and 2. The second SO₂ monitor (site 3980-023) is a NAMS station sited for population exposure measurements and is located 5.1 kilometers from the facility. The nearest lead monitor is located at site 2260-002, 3.2 kilometers from the RRF. This SPM monitor is sited to measure the maximum concentration of lead in an area of high traffic volume. As such, concentration levels measured at this site should be greater than at the RRF and thus considered to be a conservative measure of background levels there.

Although fluorides are subject to monitoring requirements, no EPA-approved method currently exists to measure ambient concentration of this pollutant.

Table V-4 shows the monitoring ambient air quality levels for the most recent complete year (1982) for all the criteria pollutants, including the required data for SO₂ and Pb. These data were collected from existing monitors in Pinellas County.

TABLE V-3

MAXIMUM AIR QUALITY IMPACTS (UNIT 3 ONLY)
FOR COMPARISON TO DE MINIMUS AMBIENT LEVELS

<u>Pollutant</u>		<u>Maximum Modeled Concentration (ug/m³)</u>	<u>De minimus Ambient Impact Level (ug/m³)</u>
SO ₂	(24-hour)	16.4	13
PM	(24-hour)	4.1	10
NO ₂	(Annual)	1.7	14
CO	(8-hour)	8.6	575
Pb	(Quarterly)	0.037	0.1
Hg	(24-hour)	0.051	0.25
Fluorides	(24-hour)	1.56	0.25

TABLE V-4

PINELLAS COUNTY 1982 MONITORING DATA IN THE VICINITY OF
THE PINELLAS COUNTY RESOURCE RECOVERY FACILITY

<u>Pollutant</u>	<u>Site</u>	<u>Averaging Time</u>	<u>Maximum Concentration (ug/m³)</u>	<u>2nd Maximum Concentration (ug/m³)</u>
SO ₂	3980 023	3-hour	642	485
		24-hour	205	112
		Annual	24	-
PM	3980 023	24-hour	67	64
		Annual	33	-
NO ₂	3980 018	Annual	27	-
CO	3980 018	1-hour	14000	11000
		8-hour	7000	6000
Pb	3980 024	Quarterly	0.8	0.7

C. PSD Increment Analysis

The Pinellas County RRF is located in an area where the Class II PSD increments apply. The facility is also located approximately 75 kilometers from the Class I Chassahowitzka National Wilderness Area. As such, an analysis of the impact on this area must be performed.

A PSD increment analysis is required for the pollutants SO₂ and PM only. The PSD increments represent the amount that new sources in the area may increase ambient ground-level concentrations of these pollutants for various time averages. At no time, however, can the increased loading of these pollutants into the atmosphere from these new sources cause or contribute to a violation of the ambient air quality standards.

Units 1, 2, and 3 of the Pinellas County RRF all consume PSD increments. In addition, several other new sources in the area have been identified which may interact with the Pinellas County RRF in consuming the allowed PSD increments. These sources are the McKay Bay RRF and the TECO Big Bend power plant. Two other sources have been identified by the DER as having the potential to affect the increment consumption. These sources are the City of Largo Wastewater Treatment Facility and the Hubert Rutland Hospital. However, analysis by the DER has shown that these two additional sources will not significantly contribute to increment consumption.

Atmospheric dispersion modeling was performed, as discussed previously, taking into account only those new sources which consume PSD increment. The results of the modeling are summarized in Table V-5.

The impact of these sources on the nearest Class I area was not explicitly modeled because the models used in this air quality analysis are not appropriate for predicting ground-level concentrations beyond 50 kilometers. However, the impact on the Class I area may be extrapolated from modeling results showing the proposed Unit 3 impact on two distant nonattainment areas. An SO₂ nonattainment area is located near Tarpon Springs approximately 23.5 kilometers from the Pinellas County RRF. The impacts of Unit 3 alone on this area are 2.2 ug/m³, 3 hour average; 0.3 ug/m³, 24 hour average; and 0.02 ug/m³, annual average. These values are less than significant for impacts on nonattainment areas and would be much less at the distance of the Class I area. A PM nonattainment area is located in Tampa, 14.4 kilometers from the RRF. Here, the impacts of Unit 3 alone are 0.01 ug/m³, 24 hour average and 0.006 ug/m³, annual average. Again, these impacts are less than significant for nonattainment areas and the concentrations would be much less at the distance of the Class I area. Table V-5 indicates the results of all the PSD increment modeling.

TABLE V-5
 COMPARISON OF NEW SOURCE IMPACTS
 WITH PSD INCREMENTS

Pollutant and Time Average	PSD Class II Increment ($\mu\text{g}/\text{m}^3$)	Predicted Concentration ($\mu\text{g}/\text{m}^3$)	PSD Class I Increment ($\mu\text{g}/\text{m}^3$)	Predicted Concentration ($\mu\text{g}/\text{m}^3$)
SO ₂				
3-hour	512	263	25	< 4
24-hour	91	81	5	< 1
Annual	20	5	2	<< 1
PM				
24 hour	37	6	10	<< 1
Annual	19	0.4	5	<< 1

D. AAQS Analysis

Using the existing air quality in the area of the Pinellas County RRF, the proposed Unit 3 emissions are not expected to cause or contribute to a violation of an AAQS. The results of the AAQS analysis are contained in Table V-6.

Of the pollutants subject to PSD review only the criteria pollutants, SO₂, PM, CO, NO₂, and Pb have an AAQS with which to compare. All sources listed in Table V-1 were modeled to determine the maximum ground-level impacts for SO₂, and PM. For CO, NO₂, and Pb only the three units at the Pinellas County RRF were modeled to determine the maximum ground-level concentrations resulting from this facility. The quarterly (90 day) average, for which the lead standard is based, was conservatively estimated by using the maximum 24 hour concentration.

The total impact on ambient air is obtained by adding a "background" concentration to the maximum modeled concentrations. This "background" concentration takes into account all sources of the particular pollutant in question that were not explicitly modeled. A conservative estimate of these "background" concentrations is listed in Table V-4. These are conservative estimates because sources used in the modeling may have contributed to the monitored value.

TABLE V-6
 COMPARISON OF TOTAL IMPACTS WITH
 AMBIENT AIR QUALITY STANDARDS

Pollutant and Time Average	Maximum Impact Unit 3 (ug/m ³)	Maximum Impact All Sources (ug/m ³)	Existing Background (ug/m ³)	Maximum Total Impact (ug/m ³)	Florida AAQS (ug/m ³)
SO ₂					
3 hour	34	269	485	754	1300
24 hour	16	97	112	209	260
Annual	1	13	24	37	60
PM					
24 hour	4	6	64	70	150
Annual	0.2	0.7	33	34	60
NO ₂					
Annual	2	6	27	33	100
CO					
1 hour	13	39	11000	11039	40000
8 hour	9	27	6000	6027	10000
Pb					
Quarterly	0.037	0.113	0.8	0.913	1.5

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VI. Additional Impacts Analysis

A. Impacts on Soils and Vegetation

The maximum ground-level concentrations predicted to occur as a result of emissions from the proposed project in conjunction with all other sources, including background concentrations, will be below all applicable AAQS including the secondary standards designed to protect public welfare related values. No soils or species of vegetation highly sensitive to these emissions in the concentrations predicted are known to occur in the site vicinity, or in the Chasahowitzka Class I area.

B. Impact on Visibility

A level I visibility screening analysis was performed to determine if any impact would occur in the Class I area. The analysis showed that there was no potential for an adverse impact on visibility in this area.

C. Acid Rain Impact

The increased emission of SO₂ and NO_x, precursors to possible acid formation and subsequent acidic rain, from the proposed Unit 3 project are relatively small. In comparison with the emissions of these pollutants from nearby power plants the increased loading due to the proposed project is nonsignificant. Thus, no additional impact on the acidity of rainfall is expected as a result of this project.

D. Growth-Related Air Quality Impacts

The construction of the proposed Unit 3 will require between 200 and 300 persons. Nearly all will be from the local area. The project is not expected to stimulate any additional growth or shift of projected growth to the extent that an air quality impact will result.

E. GEP Stack Height Determination

Good engineering practice (GEP) stack height means the greater of: (1) 65 meters; or (2) the maximum nearby building height plus 1.5 times the building height or width, whichever is less. For the proposed project the building height is 35.4 meters and the building width is 35.0 meters. Thus definition (2) above leads to a GEP stack height of 87.9 meters.

Due to the proximity of the facility to an airport, the stack height cannot be built to the GEP height. The applicant has addressed the possible increased ground level concentrations (as a result of aerodynamic effects of the nearby building) by including a downwash mechanism in the modeling.

VII. Final Permit Conditions

PART I. - Specific Conditions

1. Emission Limitations

a. Stack emissions from Unit 3 shall not exceed the following:

- (1) Particulate: 0.030 grains per dry standard cubic foot (corrected to 12% CO₂), or a final operating particulate emission limit established after startup, whichever is more stringent. This limit shall be restricted to no more than 0.030 grains per dry standard cubic foot (corrected to 12% CO₂) or no less than 0.020 grains per dry standard cubic foot (corrected to 12% CO₂).

Within 24 months of startup of operation, the County shall submit compliance tests that will be used to determine the new particulate emission limit. The limit will be determined by observed average emission rate (\bar{x}) from the submitted compliance tests and will be statistically analyzed using the one tailed student T test ($t_{.05} = (\bar{x} - u) n^{0.5}/s$) at the 95% confidence level to derive a mean emission rate (u), where s is the standard deviation of observed values n . The final operating particulate emission limit shall be this mean emission rate (u).

- (2) Visible Emissions: Opacity of stack emissions shall not be greater than 15% opacity.
- (3) SO₂: 170.0 lbs/hr
- (4) Nitrogen Oxides: 254.0 lbs/hr
- (5) Carbon Monoxide: 66.0 lbs/hr
- (6) Lead: 2.80 lbs/hr
- (7) Fluorides: 8.31 lbs/hr
- (8) Beryllium: 9.0×10^{-5} lbs/hr
- (9) Mercury: 0.294 lbs/hr when more than 2205 lbs/day of municipal sludge is fired.
- (10) There shall be a 10% opacity limit for emissions from the refuse bunker and ash handling and loadout. The potential for dust generation by ash handling activities will be mitigated by quenching the ash prior to loading in ash transport trucks and/or scrap piles.
- (11) Unit #3 is subject to 40 CFR Part 60, Subpart E, New Source Performance Standards, except that where requirements in this permit are more restrictive, the requirements in this permit shall apply.

b. The municipal solid waste (MSW) incinerator shall not be loaded in excess of its rated capacity of 87,500 pounds per hour MSW or operated in excess of the maximum steam rate of 275,000 pounds per hour.

c. Compliance Tests

(1) a. Compliance tests for particulate matter, lead, SO₂, nitrogen oxides, CO, fluorides, mercury, and beryllium shall be conducted in accordance with 40 CFR §60.8 (a), (b), (d), (e), and (f). An annual test will be conducted for particulate matter.

b. Compliance with the opacity standard in condition 1.a.(2) of this part shall be determined in accordance with 40 CFR §60.11 (b) and (e).

c. Compliance with the opacity standard in condition 1.a.(10) of this part shall be determined by evaluating emissions from the refuse bunker and ash handling and loadout stations in accordance with EPA reference method 9.

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

a. Methods 1 for selection of sample site and sample traverses.

b. Method 2 for determining stack gas flow rate when converting concentrations to or from mass emission limits.

c. Method 3 for gas analysis when needed for calculation of molecular weight or percent CO₂.

d. Method 4 for determining stack gas flow rate when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits.

e. Method 5 for concentration of particulate matter and associated moisture content. One sample shall constitute one test run.

f. Method 9 for visible determination of the opacity of emissions.

g. Method 6 for concentration of SO₂. Two samples, taken at approximately 30 minute intervals, shall constitute one test run.

h. Method 7 for concentration of nitrogen oxides. Four samples, taken at approximately 15 minute intervals, shall constitute one test run.

i. Method 10 for determination of CO concentrations. One sample constitutes one test run.

- j. Method 12 for determination of lead concentration and associated moisture content. One sample constitutes one test run.
- k. Method 13B for determination of fluoride concentrations and associated moisture content. One sample shall constitute one test run.
- l. Method 101A for determination of mercury emission rate and associated moisture content. One sample shall constitute one test run.
- m. Method 104 for determination of beryllium emission rate and associated moisture content. One sample shall constitute one test run.

2. Compliance with condition 1.b shall be determined through the continuous monitoring and recording of the steam production. The devices installed for this purpose shall be adequately maintained and in operation during all periods of steam production.

3. The height of the boiler exhaust stack shall not be less than 161 feet above ground level at the base of the stack.

4. The incinerator boilers shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, rated capacity, efficiency, and certification number.

5. Fuel

The Resource Recovery Facility shall utilize refuse such as garbage and trash (as defined in Chapter 17-7, FAC) but not grease, scum, grit screenings or sewage sludge.

6. Air Pollution Control Equipment

The permittee shall install, continuously operate, and maintain a particulate emission control device for the control of particulates. This device shall be fully operational upon startup and subsequent firing of the boilers.

7. Continuous Emission Monitoring

a. Prior to the date of startup and thereafter, the permittee shall install, maintain, and operate the following continuous monitoring systems for the Unit 3 exhaust stack:

- (1) Continuous emission monitoring (CEM) systems to measure stack gas opacity, CO, and O₂ concentrations for each unit. The systems shall meet the EPA monitoring performance specifications of 40 CFR 60.13 and 40 CFR 60, Appendix B, during initial compliance testing.

- (2) CEM data recorded during periods of startup, shutdown, and malfunction shall be reported but excluded from compliance averaging periods for CO and opacity.
 - (3) Excess emissions for CO emissions shall be defined as any applicable period during which the average emissions of CO, as measured by the CEM, exceeds 150 ppm (4-day rolling average, dry volume, corrected to 8% O₂).
 - (4) Excess opacity resulting from startup or shutdown shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess opacity shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by EPA for longer duration.
8. 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 or shutdown shall be prohibited.

9. Reporting

- a. A copy of the results of the stack tests shall be submitted within forty-five days of testing to the Florida DER Bureau of Air Quality Management, the DER Southwest Florida District Office, Pinellas County Department of Environmental Management, and EPA Region IV.
- b. Stack monitoring shall be reported to the DER Southwest District Office and EPA Region IV on a quarterly basis in accordance with Section 17-2.710, FAC, and 40 CFR Part 60.7.
- c. Addresses for submitting reports are:

EPA, Region IV

Chief, Air Compliance Branch
U. S. Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Florida Department of Environmental Regulation (DER)

Deputy Chief, Compliance and Ambient Monitoring
Bureau of Air Quality Management
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

Southwest District Office of DER

District Manager
Department of Environmental Regulation
7601 Highway 301 N.
Tampa, Florida 33610

Pinellas County

Pinellas County Department of Environmental Management
Division of Air Quality
16100 Fairchild Drive
Bldg. V102
Clearwater, Florida 33520

PART II. - General Conditions

1. The permittee shall comply with the notification and record keeping requirements codified at 40 CFR Part 60, Subpart A, 60.7. In addition, the permittee shall provide EPA 30 days notice of any anticipated emission testing demonstrations required under condition 1.a.(1).
2. The permittee shall retain records of all information resulting from monitoring activities and information indicating operation parameters as specified in the specific conditions of this permit for a minimum of two (2) years from the date of recording.
3. If, for any reason, the permittee does not comply with or will not be able to comply with the emission limitations specified in this permit, the permittee shall provide EPA with the following information in writing within five (5) days of such condition:
 - (a) description of noncomplying emission(s),
 - (b) cause of noncompliance,
 - (c) anticipated time the noncompliance is expected to continue or, if corrected, the duration of the period of noncompliance,
 - (d) steps taken by the permittee to reduce and eliminate the noncomplying emissions.

Failure to provide the above information when appropriate shall constitute a violation of the terms and conditions of this permit. Submittal of the aforementioned information does not constitute a waiver of the emission limitations contained within this permit.

4. Any proposed change in the information submitted in the application, as modified by the final determination, regarding facility emissions or changes in the quantity or quality of materials processed that would result in new or increased emissions or ambient air quality impact must be reported to EPA. If appropriate, modifications to the permit may then be made by EPA to reflect any necessary changes in the permit conditions.

In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein. Any construction or operation of the source in material variance with the application, as modified by the final determination, shall be considered a violation of this permit.

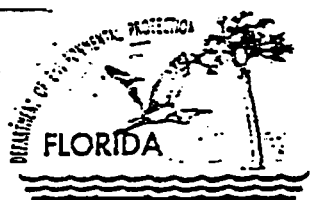
5. In the event of any change in control of ownership of the source described in the permit, the permittee shall notify the succeeding owner of the existence of this permit, and EPA of the change in control of ownership within 30 days.

6. The permittee shall allow representatives of the state and local environmental control agency or representatives of the EPA, upon the presentation of credentials:
 - (a) to enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of this permit;
 - (b) to have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit, or the Clean Air Act;
 - (c) to inspect at reasonable times any monitoring equipment or monitoring methods required in this permit;
 - (d) to sample at reasonable times any emissions of pollutants; and
 - (e) to perform at reasonable times an operation and maintenance inspection of the permitted source.

7. The conditions of this permit are severable, and if any provision of this permit is held invalid, the remainder of this permit shall not be affected.

VIII. PUBLIC COMMENTS/NOTICE

Public notice was given on June 24, 1986, for the Pinellas County RRF Unit 3. No comments were received during the public comment period.



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

October 10, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Russell Menke, Project Facilitator
Air Pollution Control Retrofit Project
Pinellas County Resource Recovery Facility
14 S. Fort Harrison Avenue - 5th Floor
Clearwater, Florida 34616

Dear Mr. Menke:

RE: Permit Amendment PSD-FL-011(A), PSD-FL-098(A)
Pinellas County RRF Air Pollution Control Project

The Department hereby approves the replacement of the existing air pollution control systems on Units 1, 2, and 3 at the Pinellas County Resource Recovery Facility (PCRRF) as detailed in your three volume application dated May 19, 1995. The existing systems consisting of Electrostatic Precipitators will be replaced with spray dryer/absorbers for acid gas control followed by fabric filter baghouses for particulate emission control. Activated carbon injection will be utilized to enhance air toxics emissions reductions and removal by the baghouses.

During project construction and subsequent operation, the facility must continue to comply with the most stringent conditions of either its Prevention of Significant Deterioration (PSD) permits or its State of Florida Site Certification for PCRRF.

Compliance requirements with the State of Florida mercury rule will be incorporated into a modification of the State of Florida Site Certification. Requirements pursuant to future adoption by the State of Florida of the proposed EPA Emission Guidelines: Municipal Waste Combustors (40 CFR 60, Subpart Cb) will be incorporated into both the Certification and your Title V Operating Permit consistent with the future State Implementation Plan (SIP) revision implementing Subpart Cb.

Per the letter dated September 21, 1995 to Landers and Parsons, the U.S. Environmental Protection Agency (EPA) concurred with the proposed project as a permanent measure to reduce potential emissions of dioxin from the PCRRF.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

Mr. Russell Menke
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October 10, 1995

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (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 at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information:

- (a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department 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 facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.


If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the amendment request/application have the right to petition to become a party to the proceeding. The petition must conform to the requirements

Mr. Russell Menke
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October 10, 1995

specified above and be filed (received) within 14 days of receipt of this amendment in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

A copy of this amendment letter shall be attached to and shall become part of Permits PSD-FL-011 and PSD-FL-098.


STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


Howard L. Rhodes, Director
Division Air Resources Management

CERTIFICATE OF SERVICE

This is to certify that this Permit Amendment and all copies were mailed to the listed persons before the close of business on 10-11-95.

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to Chapter 120.52(9), Florida Statutes, with the designated Deputy Clerk, receipt of which is hereby acknowledged.


Ken Iker 10-11-95
(Clerk) (Date)

cc: J. Harper, EPA
J. Bunyak, NPS
P. Hessling, PCDEM
D. Dee, L & P
D. Elias, RTP Environmental
B. Thomas, SWD

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN RE: SITE CERTIFICATION)	OGC NO. 95-1442
PINELLAS COUNTY RESOURCE)	CERTIFICATION NO. PA 78-11
RECOVERY FACILITY UNITS 1-3)	PA 83-18
MODIFICATION OF CONDITIONS)	
OF CERTIFICATION)	

CORRECTED FINAL ORDER MODIFYING CONDITIONS OF CERTIFICATION

On July 20, 1979 and March 20, 1984, the Governor and Cabinet, acting as the Siting Board, issued final orders approving certification of Units 1 & 2 and Unit 3 of the Pinellas County Resource Recovery Facility. The certification orders approved the construction and operation of a municipal waste-fired, resource recovery power plant and associated facilities to be located in Pinellas County, Florida. The certification has been previously modified by Department order on July 28, 1986 (OGC Case No. 85-0470).

On May 22, 1995, Pinellas County filed a request to modify the conditions of certification pursuant to Section 403.516(1)(b), Florida Statutes (F.S.). The County's request was subsequently revised on July 20, 1995, and April 4, 1996. Pinellas County requested changes to the conditions of certification to allow the installation of new air pollution control systems to meet proposed federal standards, installation of an auxiliary boiler, a decrease in size of the certified site and provisions for modification of conditions when federally delegated permits are modified. The changes to the conditions are consistent with the changes that have been made in the corresponding Prevention of Significant Deterioration air construction permits (No. PSD-FL-011(A) and PSD-FL-098(A)), which the Department of Environmental Protection amended on October 11, 1995.

Copies of Pinellas County's request were distributed to all parties to the certification

proceeding and made available for public review. On April 26, 1996, the Department published Notices of Intent to Issue Proposed Modification in the Florida Administrative Weekly. Copies of the intent to issue were sent to all parties to the original proceeding. As of April 22, 1996, all of the parties to the original proceeding had received copies of the Intent to Issue. The notice specified that a hearing would be held if a party to the original certification hearing objects within 45 days from receipt of the proposed modification or if a person whose substantial interests will be affected by the proposed modification objects in writing within 30 days after issuance of the public notice. Notice of the Department's intent also was published in the St. Petersburg Times newspaper on May 7, 1996. No timely objection to the proposed modifications that are set forth below was received by the Department.

Accordingly, in the absence of any timely objection, IT IS ORDERED:

The proposed modifications to the Conditions of Certification as described in the County's modification request and the public notices are hereby APPROVED, subject to the modified conditions of certification set forth in Exhibits "A" and "B", which are attached hereto and incorporated herein by reference. Exhibit "A" contains the prior Conditions of Certification, plus the modifications authorized by this Final Order, which are shown as stricken or underlined language. Exhibit "B" contains the Conditions of Certification, as modified. Pursuant to Section 403.516(1)(b), F.S., the Department hereby modifies the Conditions of Certification for the Pinellas County Resource Recovery Facility as shown in Exhibits "A" and "B".

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


the Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date that the Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this 25th day of July, 1996, in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to S120.52
Florida Statutes, with the designated
Department Clerk, receipt of which
is hereby acknowledged.

Rebecca Bria 7/29/96
Clerk Date


VIRGINIA B. WETHERELL
Secretary
Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000
(904) 488-4805

CERTIFICATE OF SERVICE

I HEREBY CERTIFY this 29th day of July, 1996, that a true and correct copy of the foregoing has been sent by U.S.

Mail to the following listed persons:

Pinellas Department of Environmental
Management
315 Court Street
Clearwater, FL 34616

Paul Darst
Department of Community Affairs
2740 Centerview Drive
Tallahassee, FL 32399

Peter G. Hubbell
SWFWMD
2379 Broad Street
Brooksville, FL 34609-6899

City of Pinellas Park
Edward Foreman & Associates
City Attorney
100 Second Avenue North
Suite 300
St. Petersburg, FL 33701

Mayor Cecil Bradbury
City of Pinellas Park
Post Office Box 1100
Pinellas Park, FL 34664-1100

Jim Antista
FG&FWFC
620 South Meridian Street
Tallahassee, FL 32399

Roger Tucker
Tampa Bay Regional Planning Council
9455 Koger Boulevard, Suite 219
St. Petersburg, FL 33702-2491

David Dee, Esquire
Landers & Parsons
P.O. Box 271
Tallahassee, FL 32302

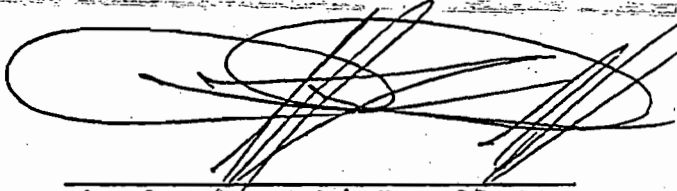
Brian Beals
Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, GA 30365

Pinellas County Building
Trades Council
c/o G. Wallace
2165 Country Club Court North
St. Petersburg, FL 33710

Plumbers and Pipe Fitters
Local Union No. 111
c/o Fred Stiles
4020 80th Avenue North
Pinellas Park, FL 33565

Russell Menke
Pinellas County
Solid Waste Management
315 Haven Street
Clearwater, FL 33516

Bob Elias, Esquire
Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850



Charles T. "Chip" Collette
Attorney for the Department

3900 Commonwealth Blvd.
MS 35
Tallahassee, FL 32399-3000
(904) 488-9730

**EXHIBIT "A" TO THE "FINAL ORDER MODIFYING
CONDITIONS OF CERTIFICATION" FOR THE
PINELLAS COUNTY RESOURCE RECOVERY FACILITY
(OGC NO. 95-1442)**

I. CHANGE IN DISCHARGE

All discharges or emissions authorized herein shall be consistent with the terms and conditions of this certification. The discharge of any pollutant not identified in the application, or more frequent than, or at a level in excess of that authorized herein, shall constitute a violation of the certification. Any anticipated Facility expansions, production increases, or process modifications which may result in new, different, or increased discharges or pollutants, change in fuel, or expansion in steam generating capacity must be reported by submission of a new or supplemental application pursuant to Chapter 403, Florida Statutes.

II. NON-COMPLIANCE NOTIFICATION

If, for any reason, the permittee does not comply with or will be unable to comply with any limitation specified in this certification, the permittee shall notify the Southwest Florida District Office Manager of the Department by telephone during the working day that said noncompliance occurs and shall confirm this in writing within seventy-two (72) hours of becoming aware of such conditions, and shall supply the following information:

A. A description of the discharge and cause of noncompliance; and

B. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying event.

III. FACILITIES OPERATION

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this certification. Such systems are not to be bypassed without prior Department approval.

IV. ADVERSE IMPACT

The permittee shall take all reasonable steps to minimize any adverse impact resulting from noncompliance with any limitation specified in this certification, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

V. RIGHT OF ENTRY

The permittee shall allow the Secretary of the Florida Department of Environmental Regulation Protection and/or authorized representatives, upon the presentation of credentials:

A. To enter upon the permittee's premises where an effluent source is located or in which records are required to be kept under the terms and conditions of this permit, and

B. To have access to and copy any records required to be kept under the conditions of this certification, and

C. To inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge or pollutants, and

D. To assess any damage to the environment or violation of ambient standards.

VI. REVOCATION OR SUSPENSION

This certification may be suspended or revoked pursuant to Section 403.512, Florida Statutes, or for violations of any of its conditions.

VII. CIVIL AND CRIMINAL LIABILITY

This certification does not relieve the permittee from civil or criminal penalties for noncompliance with any conditions of this certification, applicable rules or regulations of the Department or Chapter 403, Florida Statutes, or regulations thereunder.

Subject to Section 403.511, Florida Statutes, this certification shall not preclude the institution of any legal action or relieve the permittee from any responsibilities, or penalties established pursuant to any other applicable State Statutes, or regulations.

VIII. PROPERTY RIGHTS

The issuance of this certification does not convey any property rights in either real or personal property, nor any exclusive privileges, nor 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.

These conditions of certification apply to any activities conducted on the 20 acre certified site, as depicted in the permittee's 1995 application for modifications.

IX. SEVERABILITY

The provisions of this certification are severable, and if any provision of this certification

or the application of any provision of this certification to any circumstances, is held invalid, the application of such provision to other circumstances and the remainder of the certification shall not be affected thereby.

X. DEFINITIONS

The meaning of terms used herein shall be governed by the definitions contained in Chapter 403, Florida Statutes, and any regulations adopted pursuant thereto. In the event of any dispute over the meaning of a term in these general or special conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation or, in the alternative by the use of the commonly accepted meaning as determined by the Department.

XI. REVIEW OF SITE CERTIFICATION

The certification shall be final unless revised, revoked or suspended pursuant to law. At least every five years from the date of issuance of certification the Department shall review all monitoring data that has been submitted to it during the preceding five-year period for the purpose of determining the extent of the permittee's compliance with the conditions of this certification and the environmental impact of this Facility. The Department shall submit the results of its review and recommendations to the permittee. Such review will be repeated at least every five years thereafter.

XII. MODIFICATION OF CONDITIONS

A. Pursuant to Subsection 403.516(1), F.S., the Board hereby delegates the authority to the Secretary to modify any condition of this certification dealing with sampling, monitoring, reporting, specification of control equipment, related time schedules, emission limitations subject to notice and opportunity for hearing, or any special studies conducted, as necessary to attain the objectives of Chapter 403, Florida Statutes.

B. This certification shall be automatically modified by DEP to conform to any subsequent amendments, modifications, or renewals made by DEP under a federally delegated or approved program to any separately issued Prevention of Significant Deterioration (PSD) permit, Title V Air Permit, or National Pollutant Discharge Elimination System (NPDES) permit for the certified Facility. Pinellas County shall send each party to the original certification proceedings (at the party's last known address as shown in the record of such proceeding) notice of requests for modifications or renewals of the above listed permits if the request involves a relief mechanism (e.g., mixing zone, variance, etc.) from standards, a relaxation of conditions included in the permit due to state permitting requirements, or the inclusion of less restrictive air emission limitations in the air permits. DEP shall notify all parties to the certification proceeding of any intent to modify conditions under this section prior to taking final agency action.

C. All other modifications shall be made in accordance with Section 403.516, Florida

Statutes.

XIII. CONSTRUCTION

The Facility shall be constructed, as a minimum, pursuant to the design standards presented in the application.

A. Control Measures

1. Stormwater Runoff

To control runoff during construction which may reach and thereby pollute Waters of the State, necessary measures shall be utilized to settle, filter, treat or absorb silt-containing or pollutant-laden stormwater to insure against spillage or discharge of excavated material that may cause turbidity in excess of 50 Jackson Turbidity Units above background in Waters of the State. Control measures may consist of sediment traps, barriers, berms, and vegetation plantings. Exposed or disturbed soil shall be protected and stabilized as soon as possible to minimize silt and sediment laden runoff. The pH shall be kept within the range of 6.0 to 8.5.

2. Burning

Open burning in connection with land clearing shall be in accordance with Chapter ~~17-5~~, 62-256, FAC, and County Ordinance 76-18. No additional permits shall be required, but prior to each act of burning, the Division of Forestry shall be contacted to determine if satisfactory conditions exist for burning. Open burning shall not occur if the Division of Forestry has issued a ban on burning due to fire hazard conditions.

3. Sanitary Wastes

Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the appropriate local health agency.

4. Solid Waste

Solid wastes resulting from construction shall be disposed of in accordance with the applicable regulations of Chapter ~~17-~~ 62-701, FAC.

5. Noise

Construction noise shall not exceed local noise ordinance specifications, nor those noise standards imposed by zoning.

6. Dust

The County shall employ proper dust-control techniques to minimize fugitive dust emissions.

7. Transmission Lines

The directly associated transmission lines from the Resource Recovery Facility electric generators to the existing Florida Power Corporation Gandy substation shall be cleared, maintained and prepared without the use of herbicides.

B. Environmental Control Program

An environmental control program shall be established under the supervision of a qualified person to assure that all construction activities conform to good environmental practices and the applicable conditions of certification.

If unexpected or harmful effects or evidence ~~or of~~ irreversible environmental damage are detected during construction, the permittee shall notify the DERP Southwest Florida District Office, 7601 Highway 301 North, Tampa, Florida, 33610 ~~3804 Coconut Palm Drive, Tampa, Florida 33618-8318~~, by telephone during the working day that the effect or damage occurs and shall confirm this in writing within seventy-two (72) hours of becoming aware of such conditions, and shall provide in writing an analysis of the problem and a plan to eliminate or significantly reduce the harmful effects of damage.

C. Reporting

1. Starting three (3) months after certification or approval of a major modification involving new construction on the certified site, a quarterly construction status report shall be submitted to the Southwest Florida District Office of the Department of Environmental Regulation Protection. The report shall be a short narrative describing the progress of construction.

2. Upon completion of construction of a new or modified unit, the DERP Southwest Florida District Office will be notified in order that a pre-operational inspection can be performed.

XIV. OPERATION

A. Air

The operation of the Resource Recovery Facility shall be in accordance with all applicable provisions of Chapters ~~17-2, 17-5, and 17-7~~, 62-210, 62-296, and 62-297, Florida Administrative Code. The operation of and emissions from the hydrated lime silo in the water

softening system shall be restricted in accordance with the Department's operating permit (AO52-268853) and applicable regulations. The operation of and emissions from the auxiliary fossil-fuel fired boiler and associated fuel oil storage tank shall be restricted in accordance with condition XV.A below. In addition to the foregoing, the permittee shall comply with the following specific conditions of certification:

1. Emission Limitations upon operation of Unit 3: The emissions limitations and other requirements contained in this subsection shall apply until the electrostatic precipitators in the Resource Recovery Facility are replaced with new air pollution control (APC) systems and compliance testing is completed. Thereafter, the emissions limitations and other requirements contained in subsection 2. below, shall apply.

- a. Stack emissions from Units 1 or 2 shall not exceed the following:
 - (1) Particulate matter: in grains per dry standard cubic foot dry gas corrected to 12% CO₂ - 0.08.
 - (2) SO₂ - 170 lbs/hr each unit
 - (3) Odor: there shall be no objectionable odor.
 - (4) Visible emissions: stack opacity shall be no greater than 20% except as provided for during start-up, shutdown, or malfunctions when the provisions of 17-2.250, Section 62-210.700, FAC, shall apply.

- b. Emissions from Unit 3 shall not exceed the following:
 - (1) Particulate matter: in grains per dry standard cubic foot dry gas corrected to 12% CO₂ - 0.03.
 - (2) SO₂ - 170 lbs/hr
 - (3) Nitrogen oxides - 254 lbs/hr.
 - (4) Carbon monoxide - 66 lbs/hr.
 - (5) Lead - 4.4 lbs/hr.
 - (6) Mercury - 3200 grams/day when more than 2205 lbs/day of municipal sludge is fired. Compliance shall be determined in accordance with 40 CFR 61 Method 101, Appendix B.

- (7) Odor - there shall be no objectionable odor.
- (8) Visible emissions - stack opacity shall be no greater than 20% except as provided for during start-up, shutdown or malfunctions when the provisions of ~~17-2.250~~ Section 62-210.700, FAC, shall apply.

c. The height of the boiler exhaust stacks shall not be less than 161 feet above grade.

d. The incinerator boilers shall not be loaded in excess of their rated capacity of 87,500 pounds of municipal solid waste per hour each.

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

f. Compliance with the limitations for particulates, opacity, sulfur oxides, nitrogen oxides, carbon monoxide, and lead shall be determined in accordance with Florida Administrative Code Rule ~~17-2.700~~, DER 62-297, DEP Methods 1, 2, 3, 5, 6, 9, or 40 CFR Part 60, Appendix A, Methods 1-7, 9, 10, and 12. The stack test shall be performed at \pm 10% of the maximum steam rate of 250,000 pounds per hour.

~~2.~~ g. Electrostatic Precipitator

(1) For Unit 3 the three-field electrostatic precipitator shall be designed and constructed to achieve a maximum emission rate of 0.03 grains per dscf or allow the installation of a fourth field in the event that the three-field ESP fails to perform as specified, or if other parameters of the Facility's operation are subsequently modified, necessitating additional control.

(2) For Units 1 and 2 the three-field electrostatic precipitators shall be designed and constructed to allow the installation of a fourth field in the event that the three-field ESPs fail to perform as specified, or if other parameters of the Facility's operation are subsequently modified, necessitating additional control.

~~3.~~ h. Air Monitoring Program

~~a.~~ (1) The permittee shall install and operate continuously stack monitoring devices for oxygen and stack opacity. The

monitoring devices shall meet the applicable requirements of Chapter ~~17-2.710~~ 62-297, FAC, and 40 CFR 60.45, and 40 CFR 60.13, including certification of each device.

- b. (2) The permittee shall provide sampling ports into the stack and shall provide access to the sampling ports in accordance with Section ~~17-2.700(4)~~ Chapter 62-297, FAC.
- c. (3) The permittee shall have a sampling test of the stack emissions performed by a commercial testing firm within 90 days of the start of operation of the new boilers and annually from the date of testing thereafter.
- d. (4) The permittee shall operate two continuous SO₂ monitors and one continuous wind direction and velocity monitor in the immediate vicinity of the site. The monitors shall be specifically located as designated by the DERP and shall conform to 40 CFR 53. Monitoring shall begin upon commencement of operation.

2. The emissions limitations and other requirements contained in this subsection shall apply after the electrostatic precipitators in the Resource Recovery Facility are replaced with new air pollution control (APC) systems and compliance testing is completed.

a. Emission limits for each boiler are as follows:

- (1) Particulate matter (PM) emissions shall not exceed 0.012 grains/dry standard cubic feet (gr/dscf) corrected to 7% O₂, 14.4 lbs/hr/unit, and 63.1 tons/yr/unit.
- (2) PM emissions less than 10 microns in diameter (PM10) shall not exceed 0.012 gr/dscf corrected to 7% O₂, 14.4 lbs/hr/unit, and 63.1 tons/yr/unit.
- (3) MWC Acid Gases
 - (a) Sulfur dioxide (SO₂) emissions shall not exceed 31 parts per million by dry volume (ppmdv) corrected to 7% O₂ (24-hour daily geometric mean) or achieve 75% removal efficiency as a geometric mean value, whichever is less restrictive, with a not-to-exceed cap of 122 ppmdv corrected to 7% O₂; 0.372 lbs/MMBTU, 170.0 lbs/hr/unit, and 744.6

tons/yr/unit.

(b) Hydrogen chloride (HCl) emissions shall not exceed 31 ppmdv corrected to 7% O₂, or achieve 95% removal efficiency, whichever is less restrictive, with a not-to-exceed cap of 100 ppmdv corrected to 7% O₂; 0.174 lbs/MMBTU, 79.8 lbs/hr/unit, and 349.5 tons/yr/unit.

(4) Carbon monoxide (CO) emissions shall not exceed 100 ppmdv corrected to 7% O₂ (4-hour arithmetic block average); 0.133 lbs/MMBTU, 61.0 lbs/hr/unit, and 267.2 tons/yr/unit.

(5) MWC Metals

(a) Mercury (Hg) emissions shall not exceed 70 micrograms/dry standard cubic meter ($\mu\text{g}/\text{dscm}$) corrected to 7% O₂ or achieve 85% control, whichever is less restrictive, with a not-to-exceed cap of 100 $\mu\text{g}/\text{dscm}$ corrected to 7% O₂, 1.2×10^{-4} lb/MMBTU, 5.24×10^{-2} lbs/hr/unit, and 0.23 tons/yr/unit.

(b) Lead (Pb) emissions shall not exceed 490 $\mu\text{g}/\text{dscm}$ corrected to 7% O₂; 5.6×10^{-4} lbs/MMBTU, 0.257 lbs/hr/unit, and 1.13 tons/yr/unit.

(c) Cadmium (Cd) emissions shall not exceed 40 $\mu\text{g}/\text{dscm}$ corrected to 7% O₂; 4.6×10^{-5} lbs/MMBTU, 0.021 lbs/hr/unit, and 0.092 tons/yr/unit.

(6) MWC Organics

The polychlorinated dibenzo-p-dioxin (PCDD) and polychlorinated dibenzo-furans (PCDF) emissions shall not exceed 30 nanograms per dry standard cubic meter (ng/dscm) total mass corrected to 7% O₂; 3.44×10^{-8} lbs total mass/MMBTU, 1.6×10^{-5} lbs/hr/unit and 6.9×10^{-5} tons/yr/unit.

(7) Nitrogen oxides emissions (measured as NO_x) shall not exceed 200 ppmdv corrected to 7% O₂; or 0.439

lb/MMBTU, 200.3 lb/hr/unit, and 877.3 tons/yr/unit. The permittee may request authorization from the Department to conduct nitrogen oxides emissions averaging pursuant to 40 CFR 60.33b.

- (8) The opacity level in the stack shall not exceed 10% (six minute block average).
- (9) The emission limitations for the modified Facility are based on the compliance methods specified for each pollutant. Any change in the specified compliance method for any pollutant may result in appropriate changes to the emission limitation for the pollutant.

b. complete, are as follows:

Emissions Limitations for Minor Sources, after the retrofit is

- (1) Visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) shall not occur in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period). This visible emissions limitation shall not apply during maintenance and repair of the ash conveying system.
- (2) The particulate matter emissions shall not exceed 0.005 gr/dscf from the outlets of the baghouses at the lime storage silo, two activated carbon storage silos and the fly ash storage silo. Pursuant to Section 62-297.620(4), FAC, the particulate matter compliance test requirements are waived for these minor sources and an alternate standard of 5% opacity shall apply. A visible emission reading greater than 5% opacity does not create a presumption that the emission limit (i.e., in gr/dscf) is being violated, but would require the permittee to perform a particulate stack test in accordance with EPA Methods contained in 40 CFR 60, Appendix A.
- (3) The particulate matter emissions shall not exceed 0.0102 gr/dscf from the outlet of the cyclone/wet scrubber system at the metals recovery system. Pursuant to Section 62-297.620(4), FAC, the particulate matter compliance test requirements are waived for this minor source and an alternate standard of 5% opacity shall apply. A visible emission reading greater than 5% opacity does not create a presumption that the emission limit (i.e., in gr/dscf) is being

violated, but would require the permittee to perform a particulate stack test in accordance with EPA Methods contained in 40 CFR 60, Appendix A.

c. Operating Standards

- (1) After the modifications to the Resource Recovery Facility are complete, the height of the boiler stack shall not be less than 165 feet above the ground level at the base of the stack.
- (2) Each MWC unit shall be allowed to operate up to 110% of the unit's maximum demonstrated load capacity, as achieved during the most recent dioxin/furan compliance test. Maximum capacity shall be based on the steam (or feedwater) flow rate, which shall be continuously monitored according to the American Society of Mechanical Engineers (ASME) Power Test Code (PTC) for Steam Generating Units (PTC 4.1 and PTC 19.5) or as required by USEPA and/or FDEP regulations.
- (3) The incinerator boilers shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, rated capacity and certification number.
- (4) A Facility-specific maximum flue gas temperature at the final PM control device inlet shall be established as demonstrated during the most recent dioxin/furan compliance test. The maximum demonstrated PM control device inlet temperature shall be established as the maximum 4-hr block average temperature measured during the most recent dioxin/furan compliance test. The MWC must then be operated such that the temperature of the final PM control device inlet does not exceed this level by more than 17°C (4-hour block basis).
- (5) The carbon injection rate must be calculated and maintained in compliance with the requirements set forth in 40 CFR 60.58b(m).
- (6) The chief Facility operator, shift supervisors, and control room operators shall complete USEPA or State MWC operator training courses in compliance with 40 CFR

60.54b.

- (7) The Facility operator shall develop a site-specific training manual and shall establish a training program to review the operating manual with each person who has responsibilities affecting the operation of the Facility. The manual and training shall be updated annually.

d. Compliance Requirements

The following compliance requirements shall apply after the Facility's new air pollution control systems are operational.

- (1) A Continuous Emissions Monitor (CEM) shall be used for the measurement of oxygen at each location where carbon monoxide (CO), sulfur dioxide (SO₂), or nitrogen oxide (NO_x) emissions are monitored. The monitor shall be installed, evaluated, and operated as required by 40 CFR 60.13. The monitor shall conform to Performance Specification 3 in 40 CFR 60, Appendix B. Quality assurance procedures shall conform to 40 CFR 60, Appendix F. The initial performance evaluation will be completed within 180 days after start-up of the modified Facility.
- (2) Compliance with PM emission limits shall be determined by USEPA Method 5. USEPA Method 1 shall be used to select sampling sites and number of traverse points. USEPA Method 3 shall be used for gas analysis. Compliance with the opacity limit shall be determined by USEPA Method 9. A minimum of three test runs shall be conducted under representative full load operating conditions. The average of these test runs shall be used to determine compliance. Compliance with PM₁₀ emission limits shall be determined by using front half filterable PM₁₀ particulate matter only. The initial compliance for PM emissions and opacity shall be conducted within 60 days after achieving maximum operating capacity, but no later than 180 days after start-up. Following the initial compliance test, performance tests for particulate and opacity shall be conducted on an annual basis (no more than 12 calendar months following the previous performance test).

- (3) A Continuous Opacity Monitor System (COMS) for measuring opacity shall be installed. Compliance shall be determined by USEPA Method 9. The output of the COMS shall be recorded on a six-minute block average basis. The COMS shall be installed, evaluated, and operated in accordance with 40 CFR 60.13, and will conform to Performance Specification 1 in 40 CFR 60, Appendix B. The initial performance evaluation shall be completed within 180 days after start-up.
- (4) Compliance with emission limits for cadmium (Cd), lead (Pb), and mercury (Hg) shall be determined by USEPA Method 29. A minimum sample volume of 1.7 cubic meters shall be obtained for the mercury test. Oxygen measurement shall be obtained simultaneously with each test run. The location and number of sampling points shall be determined by USEPA Method 1. USEPA Method 3 shall be used for the flue gas analysis. A minimum of three test runs shall be conducted under representative full load operating conditions. The average of these test runs shall be used to determine compliance. Initial compliance tests shall be conducted within 60 days after achieving maximum operating capacity, but no later than 180 days after start-up. Following the completion of initial compliance testing, a performance test shall be conducted on an annual basis (no more than 12 calendar months following the previous performance test).
- (5) Sulfur Dioxide
- Compliance with sulfur dioxide (SO₂) emission limits shall be determined by using Continuous Emissions Monitor (CEM) systems to measure SO₂ emissions and to calculate a 24-hour daily geometric mean emission concentration. CEM systems shall be used to measure inlet and outlet concentrations of SO₂. An oxygen measurement shall be obtained simultaneously with the SO₂ measurements. Compliance shall be determined based on the geometric mean of the hourly arithmetic average emission concentration during each daily 24-hour period measured between 12:00 midnight and the following midnight. The one-hour arithmetic averages shall be expressed as ppm_{dv} at 7% O₂, and shall be calculated using at least two data points. The CEM system shall be installed, evaluated, and

operated in compliance with 40 CFR 60.13. The initial performance test shall be completed within 180 days after start-up. The CEM shall be operated in accordance with Performance Specification 2 in 40 CFR 60, Appendix B, and quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 in 40 CFR 60, Appendix F.

(6) Nitrogen Oxides

Compliance with nitrogen oxides (NOx) emissions limits shall be determined by use of a CEM system to measure NOx and calculating a 24-hour daily arithmetic average. An oxygen measurement shall be obtained simultaneously with each measurement. Compliance with the NOx emission limit shall be based on the arithmetic average of the hourly emission concentration with the CEM system during each 24-hour daily period corrected to 7% O₂, measured between 12:00 midnight and the following midnight. At least two data points shall be used to calculate the one-hour arithmetic average. The CEM installation, evaluation, and operation shall follow the procedures set forth in 40 CFR 60.13. The CEM shall be operated according to Performance Specification 2 in 40 CFR 60, Appendix B. Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 in 40 CFR 60, Appendix F. The initial evaluation shall be completed within 180 days of the initial start-up

(7) Hydrogen Chloride

Compliance with hydrogen chloride (HCl) emission limits shall be determined by USEPA Method 26. The minimum sampling time shall be one hour. A minimum of three test runs shall be conducted under representative full load operating conditions. The average of these test runs shall be used to determine compliance. Oxygen measurement shall be obtained simultaneously with each test run. Initial compliance tests shall be conducted within 60 days after achieving maximum operating capacity, but no later than 180 days after start-up. Thereafter, annual performance tests shall be conducted to verify compliance.

(8) Dioxins/Furans

Compliance with emission limits for dioxin/furan shall be determined by USEPA Method 23. The minimum sample time for each test run shall be four hours. Oxygen measurement shall be obtained simultaneously with each test run. A minimum of three test runs shall be conducted under representative full load operating conditions. The average of these test runs shall be used to determine compliance. The initial compliance test shall be conducted within 60 days after achieving maximum operating capacity, but no later than 180 days after start-up. Thereafter, compliance shall be demonstrated by annual stack tests. If all three units achieve an emissions level of 15 ng/dscm corrected to 7% O₂ for two consecutive years, the permittee may request authorization from the Department to perform subsequent annual stack tests on only one unit per year.

(9) Carbon Monoxide

Compliance with carbon monoxide (CO) emission limits shall be determined by a CEM system for measuring CO at the combustor outlet using a four-hour block arithmetic average. The CEM system shall be operated according to Performance Specification 4A in 40 CFR 60, Appendix B. The four-hour arithmetic average (expressed as ppm_{dv} at 7% O₂) shall be calculated from one-hour arithmetic averages with the use of at least two data points. Required data shall consist of valid paired hourly averages (i.e., CO and O₂). Quarterly accuracy determinations and daily calibration drift tests for CEM shall be performed in accordance with Procedure 1 in 40 CFR 60, Appendix F.

e. Operating Requirements for the Modified Facility

After the new APC systems are operational and the other modifications to the Resource Recovery Facility are complete, the Facility shall comply with the following operating requirements:

(1) MWC Load Level

Compliance with MWC load level requirements shall be determined by a steam flow meter using the American Society of Mechanical Engineers (ASME) Power Test Code

Method 4.1. Steam flow shall be calculated in four-hour block arithmetic averages. The design, construction, installation, and calibration of the steam flow meter shall be based on ASME Test Code 19.5. The maximum demonstrated MWC unit load shall be determined during the initial compliance test for dioxins/furans and each subsequent compliance test, during which compliance with dioxin/furan limits are achieved. The maximum demonstrated MWC unit load shall be the maximum four-hour arithmetic average load achieved during the most recent test during which compliance with the dioxin/furan emission limit was achieved.

(2) Particulate Matter Control Device Temperature

Compliance with maximum particulate matter (PM) control device temperature requirements shall be determined by a device to measure temperature on a continuous basis at the inlet to the final PM control device. Temperature shall be calculated in four-hour block arithmetic averages. The maximum demonstrated PM control device temperature shall be determined during the initial compliance test for dioxins/furans and each subsequent test during which compliance with the dioxins/furan emission limit is achieved. The maximum PM control device temperature shall be the maximum four-hour arithmetic average temperature achieved at the final PM control device inlet during the most recent test which compliance with the dioxin/furan limit was achieved.

(3) MWC Unit Capacity

The MWC unit capacity shall be calculated based on 24 hours of operation at the maximum design charging rate.

(4) Fly Ash/Bottom Ash Fugitive Emissions

Compliance with the fly ash/bottom ash fugitive emission standards shall be determined by USEPA Method 22. The minimum observation time shall be three hours. The observation period shall include times when the Facility will transfer ash from the MWC unit to the ash storage area and times when the ash will be loaded for disposal. However, the fugitive emission standard does not apply during

maintenance and repair of the ash conveying systems. Initial compliance tests shall be conducted within 60 days after achieving maximum operating capacity, but no later than 180 days after start-up.

4.3. Reporting Requirements

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

b. Stack monitoring shall be reported to the ~~DER DEP~~ Southwest District Office on a quarterly basis in accordance with Section ~~17-2.710~~ 62-297, FAC, and 40 CFR, Part 60, Subsection 60.7.

~~c. SO₂ monitoring shall be reported to the DER Southwest District Office on a monthly basis.~~

B. Fuel

The fuel used in the Resource Recovery Facility shall consist of municipal solid waste, as defined in 40 CFR 60.51a, and the other non-hazardous solid wastes described in the permittee's 1995 application for a modification. Natural gas may be used as a supplemental fuel during startups, shutdowns, and at other times when necessary and consistent with good combustion practices. The Resource Recovery Facility shall utilize refuse such as garbage and trash (as defined in Chapter 17-7, FAC) as its fuel. Use of alternate fuels would necessitate an amendment of the County's application or a modification of these Conditions of Certification, as determined by the Department.

C. Cooling Tower

1. Makeup Water Constituency

The Resource Recovery Facility shall utilize only treated sewage effluent, or stormwater runoff from the stormwater holding pond, as cooling tower makeup water. The effluent shall have received prior to use in the tower, as a minimum, secondary treatment, as well as treatment described in Condition XIV.C.2. below. Use of waters other than treated sewage effluent or site stormwater, i.e., higher quality potable waters or lower quality less-than-secondarily treated sewage effluent, will require a modification of conditions agreed to by the Southwest Florida Water Management District and the Department and must be approved by the Governor and Cabinet.

2. Chlorination

Chlorine levels in the cooling tower makeup water shall continuously be

monitored, prior to insertion in the cooling towers. Sewage effluent from the Northeast St. Petersburg Wastewater Treatment Plant used as makeup shall be treated if as necessary to maintain a 1.0 mg/liter total chlorine residual after fifteen minutes contact time. Makeup water from the Largo Wastewater Treatment Plant shall be treated to maintain a 1.0 mg/liter free chlorine residual after fifteen minutes contact time. Chlorination should occur at an effluent turbidity of 5 Nephelometric Turbidity Units or less.

3. Special Studies

Upon satisfactory demonstration to the Department that the number of viruses entering the towers in the effluent makeup from the upgraded Largo Plant can be reduced to an undetectable level with the use of a lesser amount of chlorination, the above requirement may be altered to 1.0 mg/liter total chlorine residual after a 15 minute contact time or alternate levels as approved by the Department. This demonstration may occur through performance of special studies approved by the Department. Alteration of the chlorination requirements must still insure adequate treatment for the control of bacterial growth in the cooling towers.

D. Water Discharges

1. Surface Water

a. Any discharges from the site stormwater/leachate treatment system via the emergency overflow structure which result from an event LESS than a ten-year, 24-hour storm (as defined by the U.S. Weather Bureau Technical Paper No. 40, or the DOT drainage manual, or similar documents) shall meet State Water Quality Standards, as contained in Chapter 17-3 62-302, F.A.C.

b. ~~Sampling of water quality in the aeration pond, the cattail ponds, and an analysis of the tissues of the cattails utilized as part of the leachate/stormwater treatment system shall be conducted prior to pumping of leachate or stormwater through this system to verify background levels and concentrations of any metals, especially heavy metals, already present in the ponds or the vegetation. Within three months after commencement of stormwater/leachate pumping through this system, and quarterly thereafter, the pond waters and cattail tissues, as well as root detritus or other sediments on the bottom of the ponds shall again be sampled to determine the degree and effectiveness of heavy metal uptake treatment in this system, and for correlation with groundwater monitoring data. If analyses indicate that toxic levels of materials are present in the cattail tissues, root detritus, or other pond precipitates, then these materials shall be incinerated or otherwise removed from contact with the natural environment and groundwaters. Results of analyses conducted shall be sent to the Department for review of system effectiveness.~~

cb. Leachate, stormwater, or other site wastewaters which are to be spray irrigated shall be treated to conform to any rules promulgated by the State for the land application of wastewaters in areas not commonly accessible to the public.

dc. Cooling tower blowdown shall not be discharged to surface water.

ed. Upon satisfactory demonstration to the Department that surface water quality will not be deteriorated, a special pilot operation, in the field, to determine the environmental effect of land application of process blowdown water from the Resource Recovery Facility may be allowed. This demonstration will require submittal of background and system design data, and provisions for monitoring as approved by the Department.

2. Groundwaters

The 20 acre certified site and an adjacent landfill are located inside a slurry wall, which separates the ground and surface waters on the site from off-site areas. The permittee's discharges to groundwater on the certified site shall be restricted by the applicable conditions of the permits and regulations that govern the permittee's activities inside the slurry wall and shall be monitored in accordance with the groundwater monitoring plan for the landfill adjacent to the certified site.

a. ~~All discharges to groundwaters, such as landfill leachate, shall be collected and treated as necessary, or otherwise be of high enough quality, to be able to meet the Water Quality Standards of Chapter 17-3.101 62-520, FAC (Class G-II Groundwaters) at the boundary of the site.~~

b. ~~If the groundwater monitoring system in the vicinity of the aeration/cattail ponds indicates that groundwater quality beyond the boundary of the site has been deteriorated by substances leaching from these ponds, then these ponds shall be lined or other Departmentally approved methods employed to reduce further leaching sufficient to insure attainment of groundwater quality standards at the boundary of the site.~~

3. Groundwater Monitoring Program

Groundwater monitoring for the certified site shall be performed in the manner prescribed in the FDEP approved groundwater monitoring plan for the landfill that is located within the permittee's slurry wall and adjacent to the certified site.

a. ~~Sampling of the shallow aquifer groundwater quality shall be conducted in at least four wells in the site vicinity. One of these wells shall be up hydrologic slope from the landfill area to provide current background data, one shall be located in the immediate vicinity of the aeration/cattail ponds, and two shall be located down hydrologic slope from the landfill/spray irrigation areas. Specific location of these wells may be proposed by the applicant, but must be approved by the Department.~~

b. ~~Operational background monitoring shall commence at least one year prior to operation of the resource recovery facility. Construction of monitoring wells~~

~~and the collection of samples shall be in accordance with EPA recommended methods as contained in Procedures Manual for Ground Water Monitoring at Solid Waste Disposal Facilities (EPA/530/SW-611). The wells shall be deep enough to insure that groundwater samples can be obtained with the groundwater table elevation at its estimated lowest point and shall be protected from damage or destruction. Samples shall be analyzed in accordance with the methods described in Chapter 17-4 62-522, FAC. Analyses shall be performed by laboratories which are approved by the Department of Health and Rehabilitative Services to conduct analyses pursuant to Section 403.863, F.S., the State Public Water Supply Laboratory Certification Program.~~

~~c. The wells shall be monitored on a quarterly basis for the following parameters:~~

Conductivity	Arsenic	Selenium
Nitrates	Barium	Silver
Iron	Cadmium	Chlorides
COD	Chromium	pH
Nickel	Lead	Copper
Aluminum	Mercury	Zinc
Total Coliform Bacteria		

~~d. Reports shall be submitted in duplicate within 30 days of receipt of analysis results to the Department for distribution to the appropriate review personnel.~~

~~e. The monitoring program may be reviewed annually by the Department, and a determination made as to the necessity and extent of continuation of the program. Aspects of the program relating to sampling, monitoring, reporting, and related time schedules may be modified in accordance with the provisions of Condition Number XII.~~

E. Solid/Hazardous Waste

1. Operation of the associated landfill shall be done in accordance with the landfill's current solid waste operation permit and all applicable portions of Chapters 17-7 62-701 and 62-702, FAC, including prohibitions, procedures for closing of the landfill, and final cover requirements, or as provided in this condition (XIV.E.) in its entirety.

2. Putrescible wastes received at the landfill shall receive daily cover. No cover shall be required for the landfilling of only ash or construction/demolition debris. Daily cover shall consist of a six inch layer of compacted earth or other material approved by the DERP placed at the end of each working day.

3. Rodent and insect control shall be provided as necessary to protect the health and safety of site employees and the public. Pesticides used to control rodents, flies, and other vectors shall be as specified by the Florida Department of Agriculture and Consumer Services.

4. A monthly report shall be prepared detailing the amount and type (putrescible, special wastes, boiler residue, etc.) of materials landfilled at the site, and the treatment provided (see condition XIV.E.2. above). These reports shall be furnished to the DERP Southwest District Office quarterly, commencing 120 days after the Resource Recovery Facility becomes operational and is producing residues.

5. Unless approved by the Department with subsequent modification of conditions, ~~this the Resource Recovery Facility shall not accept materials currently defined as "Hazardous Wastes" in Chapter 62-730, F.A.C. i.e., pesticides, volatile or radioactive material, etc.~~

~~6. No putrescible wastes shall be placed below the maximum groundwater level unless permanent leachate controls are installed. Methodology for permanent leachate controls shall be submitted to the Department for review. Such methodology shall not be implemented until approved by the Department. In the absence of permanent leachate controls, demolition debris and other non-putrescible items (other than boiler residue) shall be utilized to separate the putrescible waste from the groundwater. Boiler residue may be placed below the maximum groundwater level without permanent leachate controls provided that the permittee demonstrates that the residue will not contribute to a violation of water quality criteria at the boundary of a zone of discharge extending to the site boundary. Fly ash which has been segregated or separated from bottom ash shall not be placed below the maximum groundwater level without permanent leachate controls.~~

~~7. Separate cells and lifts shall be maintained for landfilling putrescible wastes.~~

~~8. All cells will be constructed to promote leachate drainage to a low end of the cell, all leachate formed at the low end of an active cell shall be pumped to the aeration pond for treatment.~~

~~9. A chemical analysis of the boiler residue shall be conducted within 30 days after commencement of operation, testing at the minimum for levels of Cadmium, Chromium, Zinc and Lead to determine the nature and potential toxicity or hazardousness of the materials created in the combustion process.~~

~~10. Results from the residue analysis shall immediately be sent to the Department and will be used to determine whether or not these materials constitute a "Hazardous Waste" as defined by Chapter 17-30 62-730, FAC, results of these analyses may also be used for correlation with groundwater monitoring information and in any subsequent modification of conditions.~~

11. 6. If residue material are determined to be a "Hazardous Waste", then measures shall be taken to treat or dispose of the residues pursuant to rules promulgated by either Federal or State authorities.

12 7. If the nature of materials received at the Facility becomes altered, either due to modification of conditions, i.e., the Facility is allowed to incinerate already known hazardous wastes such as pesticides, or if groundwater monitoring reveals unusual conditions which may be attributable to the landfilling of this residue, then a subsequent analysis may be required at that time.

13 8. There shall be no discharge to the environment of polychlorinated biphenyl compounds.

F. Operational Safeguards

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

G. Transmission Lines

The directly associated transmission lines from the Resource Recovery Facility electric generators to the Florida Power Corporation Gandy Substation shall be kept cleared without the use of herbicides.

H. Noise

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

~~XV. STATUS OF EXISTING PERMITS~~

~~No permit may be issued for sanitary waste landfilling other than this Certification, for the area known as Bridgeway Acres II.~~

XV. CONDITIONS FOR ADDITIONAL AIR EMISSION SOURCES

A. AUXILIARY FOSSIL FUEL BOILER

1. The auxiliary fossil fuel boiler is subject to and must meet the applicable requirements of the federal New Source Performance Standards (NSPS), 40 CFR 60, Subpart Dc: Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60.40c through 60.48c. The fuel oil storage tank is subject to the recordkeeping provisions of 40 CFR 60.116b (a) and (b) in NSPS Subpart Kb: Volatile Organic Liquid Storage Vessels.

[Rule 62-204.800(7)(b), F.A.C. and 40 CFR 60, Subparts Dc and Kb].

2. The maximum permitted hours of operation for the auxiliary boiler are not limited (i.e. up to 8760 hours per year allowed).

3. The auxiliary boiler is permitted to fire only the following fuels and at the maximum rates shown:

<u>Fuel</u>	<u>Max. % Sulfur</u>	<u>Max. mmBtu/hr</u>	<u>Max. Fuel Usage</u>
<u>Natural Gas</u>	<u>=</u>	<u>99.44</u>	<u>94.7 Mcf/hour</u>
<u>#2 Fuel Oil *</u>	<u>0.05% by wt</u>	<u>96.16</u>	<u>702 gal/hour</u>

* New No. 2 Fuel oil only (waste or recycled oil is not allowed)

[PPSA permit application dated 4/96, and BACT Determination made in accordance with Rule 62-296.406(2) and (3), F.A.C.]

(NSPS Note: The sulfur content limitation of this BACT Determination is more stringent than and therefore meets the requirements of the 40 CFR 60 Subpart Dc standard for sulfur dioxide contained in 40 CFR 60.42c(d).)

4. Visible emissions shall not exceed 20% opacity, except for one six-minute period per hour during which opacity shall not exceed 27%.
[Rule 62-296.406(1), F.A.C.]

5. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C. and Pinellas County Ordinance No. 89-70, Subpart 6.620, as amended]

6. The auxiliary boiler stack shall be tested for NOx during the initial performance test and thereafter at permit renewal time. The NOx emissions shall not exceed 8.95 lbs/hr and 39.20 tons/yr. Compliance with NOx emission limits shall be determined by USEPA Method 7, 7E, or equivalent. Test reports shall be submitted to the Air Programs Section of the Southwest District Office of the Department and the Pinellas County Department of Environmental management within 45 days of the testing. (Rules 62-297.310(7)(a)1, and 62-297.310(8), F.A.C.)

7. The auxiliary boiler stack shall be tested for visible emissions (VE) within 30 days after first being placed in operation and annually thereafter. Initial VE testing shall be performed while firing No. 2 fuel oil if No. 2 fuel oil is to be utilized in the auxiliary boiler; otherwise initial VE testing shall be performed while firing natural gas. If initial VE testing is performed with natural gas, then VE testing with No. 2 fuel oil is required in accordance with the provisions of this permit and applicable regulations within 30 days after No. 2 fuel oil is first fired in the boiler. Test reports shall be submitted to the Air Programs of the Southwest District Office of the

Department and the Pinellas County Department of Environmental Management within 45 days of the testing. [Rules 62-297.310(7)(a)1, and 62-297.310(8), F.A.C.]

8. Compliance with the visible emission limitation in Condition XV.A.4, above, shall be determined using DEP Method 9 contained in Rule 62-297.401, F.A.C. The visible emissions test shall be conducted by a certified observer and be a minimum of sixty (60) minutes in duration. The visible emissions test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. The minimum requirements for stationary point source emission test procedures and reporting shall be in accordance with Rule 62-297, F.A.C. and 40 CFR 60 Appendix A. [Rule 62-297, F.A.C.]

9. Testing of emissions shall be conducted during operation of the auxiliary boiler within 90-100% of the maximum permitted fuel heat input rate of 96.16 mmBtu/hour (702 gallons/hour) for fuel oil or 99.44 mmBtu/hour (94.7 Mcf/hour) for natural gas, when feasible. A compliance test submitted at a rate less than 90% of the maximum permitted rate will automatically constitute an amended permitted heat input rate at that lesser rate plus 10%. Within 30 days of that lower amended permitted rate being exceeded, a new compliance test shall be conducted at the higher rate. The test results shall be submitted to the Department and the Air Program of the Pinellas County Department of Environmental Management within 45 days of testing. Acceptance of the test by the Department will automatically constitute an amended permit at the higher tested heat input rate plus 10%, but in no case shall the maximum permitted heat input rate of 96.16 mmBtu/hour for No. 2 fuel oil or 99.44 mmBtu/hour for natural gas be exceeded. The fuel type and heat input rate during the test shall be included with each test report. Failure to submit the required fuel information or operating under conditions that are not representative of normal operating conditions may invalidate the test and fail to provide reasonable assurance of compliance. [Rule 62-4.070(3), F.A.C.]

10. The permittee shall notify the Air Program of the Pinellas County Department of Environmental Management at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted. [Rule 62-297.310(7)(a)9, F.A.C.]

11. Subsequent to conducting the initial compliance test the permittee will be required to conduct an annual visible emissions compliance test (however, see Condition XV.A.11, below). If fuel oil has been used in this boiler for more than 400 hours during the 12 month period prior to the required annual compliance test, or if it is expected to be used in this boiler for more than 400 hours during the next 12 month period, then the annual VE test shall be conducted while firing No. 2 fuel oil. The permittee shall submit a statement of the fuel heat input rate and a description of the fuel in use as a part of any compliance test report. Failure to submit the heat input rate or fuel oil sulfur content may invalidate the test and fail to provide reasonable assurance of compliance. [Rule 62-4.070(3), F.A.C.]

12. Annual visible emissions compliance tests can be waived, on a year by year basis, if

fuel oil has not been used in this boiler for more than 400 hours for the previous 12 months and if it is not expected to be used in this boiler for more than 400 hours during the next 12 months, except that, regardless of fuel used, a VE test shall be conducted during the 6 months period prior to applying for renewal of the operation permit. Each year when the VE test is due, if this test waiver provision is invoked, a letter must be sent to the Air Compliance Sections of the Southwest District Office of the Department and the Pinellas County Department of Environmental Management stating that the above requirements for the waiver have been satisfied. This notification letter shall include a statement of the number of hours that fuel oil was fired during the last 12 month period, and, if fuel oil was fired for any period during the last 12 months, a copy of the most recent fuel records that document compliance with the percent sulfur content limit in accordance with Condition XV.A.15. below. [Rules 62-297.310(7)(a) 3 and 5, F.A.C.]

13. Compliance with the fuel sulfur content requirements of Condition XV.A.3, above, shall be demonstrated during any VE test conducted while burning oil, by submitting either of the following with the VE test report:

- A. copy of a fuel oil analysis from your fuel oil supplier representative of the oil used during the compliance test;
- B. results of the fuel oil analysis for an as-burned fuel oil sample taken during the compliance test.

Fuel sampling and analysis shall be in accordance with 40 CFR 60 Appendix A, Method 19, Section 5.2.2 (Liquid Fossil Fuel). [Rules 62-4.070(3), & 62-204.800(7)(e), F.A.C., & 40 CFR 60.44c(g) & (h)]

14. In order to document compliance with the requirements of Conditions XV.A.2, 3, and 11, the permittee shall maintain a record of the type of fuel (natural gas or No. 2 oil) used in the auxiliary boiler during each period of operation. The records shall include the total hours of operation for each period of burning No. 2 oil with a monthly total of oil-fired operating hours for the boiler for each calendar month. These records shall be recorded in a permanent form suitable for inspection upon request, and shall be retained for at least a two year period. [Rule 62-4.070(3), F.A.C.]

15. The permittee shall maintain a (daily) record of the quantity of each fuel used in the boiler for each day of operation. These records shall be recorded in a permanent form suitable for inspection upon request, and shall be retained for at least a two year period. [Rule 62-204.800, F.A.C., and 40 CFR 60.48c(g) & 60.48c(i)]

16. Ongoing compliance with the fuel oil sulfur content requirements of Condition XV.A.3 shall be demonstrated through fuel supplier documentation of fuel oil sulfur content for each shipment of oil delivered for use in the boiler. Fuel sampling and analysis shall be in accordance with 40 CFR 60 Appendix A, Method 19, Section 5.2.2 (Liquid Fossil Fuel). (See

Condition XV.A.18) The records shall include a "fuel supplier certification" (40 CFR 60.48c(f)) consisting of the name of the oil supplier and a statement from the oil supplier that the oil complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, "Standard Specification for Fuel Oils". These records shall be recorded in a permanent form suitable for inspection upon request, and shall be retained for at least a two year period. [Rule 62-4.070(3), F.A.C., and 40 CFR 60.46c(e), 60.48c(e)(11), 60.48c(f) and 60.48c(i)]

17. The permittee shall keep readily accessible records showing the dimensions of the fuel oil storage tank and an analysis showing the capacity of the storage tank. The records shall be kept for the life of the storage tank. [Rule 62-204.800, F.A.C., and 40 CFR 60.116b(a) and 60.116b(b)]

18. The permittee shall provide the Air Programs of the Southwest District Office of the Department and the Pinellas County Department of Environmental Management the following written notifications in accordance with 40 CFR 60.48c(a):

- A. Start of Construction - Provide the date construction begins on the auxiliary boiler, within thirty (30) days of that date.
- B. Initial Startup - Provide the estimated date of the initial startup of the auxiliary boiler, not more than sixty (60) days nor less than thirty (30) days prior to such date.
- C. Startup - Provide the actual date of the initial startup of the auxiliary boiler, not more than fifteen (15) days after such date. This notification shall include a statement confirming the design heat input rate of the boiler and the fuels to be combusted in the boiler.

[Rule 62-204.800, F.A.C., and 40 CFR 60.48c(a)]

19. The permittee shall submit quarterly reports of the fuel supplier sulfur content certification records required by Condition XV.A.15. In addition to the above, the quarterly report shall include a certified statement signed by the owner or operator of the Facility that the records of the fuel supplier certifications submitted represent all of the fuel combusted during the quarter. The quarterly reports shall be submitted to the Air Quality Division of the Pinellas County Department of Environmental Management within 30 days of the end of the quarter being reported. [Rule 62-204.800, F.A.C., and 40 CFR 60.48c(e)(11)]

20. The permittee shall include emissions from the auxiliary boiler and fuel oil storage tank in DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility," submitted to the Air Program of the Pinellas County Department of Environmental Management for the Facility each calendar year on or before March 1 for the preceding calendar year.

**EXHIBIT "B" TO THE "FINAL ORDER MODIFYING
CONDITIONS OF CERTIFICATION" FOR THE
PINELLAS COUNTY RESOURCE RECOVERY FACILITY
(OGC NO. 95-1442)**

I. CHANGE IN DISCHARGE

All discharges or emissions authorized herein shall be consistent with the terms and conditions of this certification. The discharge of any pollutant not identified in the application, or more frequent than, or at a level in excess of that authorized herein, shall constitute a violation of the certification. Any anticipated Facility expansions, production increases, or process modifications which may result in new, different, or increased discharges or pollutants, change in fuel, or expansion in steam generating capacity must be reported by submission of a new or supplemental application pursuant to Chapter 403, Florida Statutes.

II. NON-COMPLIANCE NOTIFICATION

If, for any reason, the permittee does not comply with or will be unable to comply with any limitation specified in this certification, the permittee shall notify the Southwest Florida District Office of the Department by telephone during the working day that said noncompliance occurs and shall confirm this in writing within seventy-two (72) hours of becoming aware of such conditions, and shall supply the following information:

A. A description of the discharge and cause of noncompliance; and

B. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying event.

III. FACILITIES OPERATION

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this certification. Such systems are not to be bypassed without prior Department approval.

IV. ADVERSE IMPACT

The permittee shall take all reasonable steps to minimize any adverse impact resulting from noncompliance with any limitation specified in this certification, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

V. RIGHT OF ENTRY

The permittee shall allow the Secretary of the Florida Department of Environmental Protection and/or authorized representatives, upon the presentation of credentials:

A. To enter upon the permittee's premises where an effluent source is located or in which records are required to be kept under the terms and conditions of this permit, and

B. To have access to and copy any records required to be kept under the conditions of this certification, and

C. To inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge or pollutants, and

D. To assess any damage to the environment or violation of ambient standards.

VI. REVOCATION OR SUSPENSION

This certification may be suspended or revoked pursuant to Section 403.512, Florida Statutes, or for violations of any of its conditions.

VII. CIVIL AND CRIMINAL LIABILITY

This certification does not relieve the permittee from civil or criminal penalties for noncompliance with any conditions of this certification, applicable rules or regulations of the Department or Chapter 403, Florida Statutes, or regulations thereunder.

Subject to Section 403.511, Florida Statutes, this certification shall not preclude the institution of any legal action or relieve the permittee from any responsibilities, or penalties established pursuant to any other applicable State Statutes, or regulations.

VIII. PROPERTY RIGHTS

The issuance of this certification does not convey any property rights in either real or personal property, nor any exclusive privileges, nor 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.

These conditions of certification apply to any activities conducted on the 20 acre certified site, as depicted in the permittee's 1995 application for modifications.

IX. SEVERABILITY

The provisions of this certification are severable, and if any provision of this certification

or the application of any provision of this certification to any circumstances, is held invalid, the application of such provision to other circumstances and the remainder of the certification shall not be affected thereby.

X. DEFINITIONS

The meaning of terms used herein shall be governed by the definitions contained in Chapter 403, Florida Statutes, and any regulations adopted pursuant thereto. In the event of any dispute over the meaning of a term in these general or special conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation or, in the alternative by the use of the commonly accepted meaning as determined by the Department.

XI. REVIEW OF SITE CERTIFICATION

The certification shall be final unless revised, revoked or suspended pursuant to law. At least every five years from the date of issuance of certification the Department shall review all monitoring data that has been submitted to it during the preceding five-year period for the purpose of determining the extent of the permittee's compliance with the conditions of this certification and the environmental impact of this Facility. The Department shall submit the results of its review and recommendations to the permittee. Such review will be repeated at least every five years thereafter.

XII. MODIFICATION OF CONDITIONS

A. Pursuant to Subsection 403.516(1), F.S., the Board hereby delegates the authority to the Secretary to modify any condition of this certification dealing with sampling, monitoring, reporting, specification of control equipment, related time schedules, emission limitations subject to notice and opportunity for hearing, or any special studies conducted, as necessary to attain the objectives of Chapter 403, Florida Statutes.

B. This certification shall be automatically modified by DEP to conform to any subsequent amendments, modifications, or renewals made by DEP under a federally delegated or approved program to any separately issued Prevention of Significant Deterioration (PSD) permit, Title V Air Permit, or National Pollutant Discharge Elimination System (NPDES) permit for the certified Facility. Pinellas County shall send each party to the original certification proceedings (at the party's last known address as shown in the record of such proceeding) notice of requests for modifications or renewals of the above listed permits if the request involves a relief mechanism (e.g., mixing zone, variance, etc.) from standards, a relaxation of conditions included in the permit due to state permitting requirements, or the inclusion of less restrictive air emission limitations in the air permits. DEP shall notify all parties to the certification proceeding of any intent to modify conditions under this section prior to taking final agency action.

C. All other modifications shall be made in accordance with Section 403.516, Florida

Statutes.

XIII. CONSTRUCTION

The Facility shall be constructed, as a minimum, pursuant to the design standards presented in the application.

A. Control Measures

1. Stormwater Runoff

To control runoff during construction which may reach and thereby pollute Waters of the State, necessary measures shall be utilized to settle, filter, treat or absorb silt-containing or pollutant-laden stormwater to insure against spillage or discharge of excavated material that may cause turbidity in excess of 50 Jackson Turbidity Units above background in Waters of the State. Control measures may consist of sediment traps, barriers, berms, and vegetation plantings. Exposed or disturbed soil shall be protected and stabilized as soon as possible to minimize silt and sediment laden runoff. The pH shall be kept within the range of 6.0 to 8.5.

2. Burning

Open burning in connection with land clearing shall be in accordance with Chapter 62-256, FAC, and County Ordinance 76-18. No additional permits shall be required, but prior to each act of burning, the Division of Forestry shall be contacted to determine if satisfactory conditions exist for burning. Open burning shall not occur if the Division of Forestry has issued a ban on burning due to fire hazard conditions.

3. Sanitary Wastes

Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the appropriate local health agency.

4. Solid Waste

Solid wastes resulting from construction shall be disposed of in accordance with the applicable regulations of Chapter 62-701, FAC.

5. Noise

Construction noise shall not exceed local noise ordinance specifications, nor those noise standards imposed by zoning.

6. Dust

The County shall employ proper dust-control techniques to minimize fugitive dust emissions.

7. Transmission Lines

The directly associated transmission lines from the Resource Recovery Facility electric generators to the existing Florida Power Corporation Gandy substation shall be cleared, maintained and prepared without the use of herbicides.

B. Environmental Control Program

An environmental control program shall be established under the supervision of a qualified person to assure that all construction activities conform to good environmental practices and the applicable conditions of certification.

If unexpected or harmful effects or evidence of irreversible environmental damage are detected during construction, the permittee shall notify the DEP Southwest Florida District Office, 3804 Coconut Palm Drive, Tampa, Florida 33618-8318, by telephone during the working day that the effect or damage occurs and shall confirm this in writing within seventy-two (72) hours of becoming aware of such conditions, and shall provide in writing an analysis of the problem and a plan to eliminate or significantly reduce the harmful effects of damage.

C. Reporting

1. Starting three (3) months after certification or approval of a major modification involving new construction on the certified site, a quarterly construction status report shall be submitted to the Southwest Florida District Office of the Department of Environmental Protection. The report shall be a short narrative describing the progress of construction.

2. Upon completion of construction of a new or modified unit, the DERP Southwest Florida District Office will be notified in order that a pre-operational inspection can be performed.

XIV. OPERATION

A. Air

The operation of the Resource Recovery Facility shall be in accordance with all applicable provisions of Chapters 62-210, 62-296, and 62-297, Florida Administrative Code. The operation of and emissions from the hydrated lime silo in the water softening system shall be

restricted in accordance with the Department's operating permit (AO52-268853) and applicable regulations. The operation of and emissions from the auxiliary fossil-fuel fired boiler and associated fuel oil storage tank shall be restricted in accordance with condition XV.A below. In addition to the foregoing, the permittee shall comply with the following specific conditions of certification:

1. The emissions limitations and other requirements contained in this subsection shall apply until the electrostatic precipitators in the Resource Recovery Facility are replaced with new air pollution control (APC) systems and compliance testing is completed. Thereafter, the emissions limitations and other requirements contained in subsection 2., below, shall apply.

a. Stack emissions from Units 1 or 2 shall not exceed the following:

- (1) Particulate matter: in grains per dry standard cubic foot corrected to 12% CO₂ - 0.08.
- (2) SO₂ - 170 lbs/hr each unit
- (3) Odor: there shall be no objectionable odor.
- (4) Visible emissions: stack opacity shall be no greater than 20% except as provided for during start-up, shutdown, or malfunctions when the provisions of Section 62-210.700, FAC, shall apply.

b. Emissions from Unit 3 shall not exceed the following:

- (1) Particulate matter: in grains per dry standard cubic foot corrected to 12% CO₂ - 0.03.
- (2) SO₂ - 170 lbs/hr
- (3) Nitrogen oxides - 254 lbs/hr.
- (4) Carbon monoxide - 66 lbs/hr.
- (5) Lead - 4.4 lbs/hr.
- (6) Mercury - 3200 grams/day when more than 2205 lbs/day of municipal sludge is fired. Compliance shall be determined in accordance with 40 CFR 61 Method 101, Appendix B.

- (7) Odor - there shall be no objectionable odor.
- (8) Visible emissions - stack opacity shall be no greater than 20% except as provided for during start-up, shutdown or malfunctions when the provisions of Section 62-210.700, FAC, shall apply.

c. The height of the boiler exhaust stacks shall not be less than 161 feet above grade.

d. The incinerator boilers shall not be loaded in excess of their rated capacity of 87,500 pounds of municipal solid waste per hour each.

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

f. Compliance with the limitations for particulates, opacity, sulfur oxides, nitrogen oxides, carbon monoxide, and lead shall be determined in accordance with Florida Administrative Code Rule 62-297, DEP Methods 1, 2, 3, 5, 6, 9, or 40 CFR Part 60, Appendix A, Methods 1-7, 9, 10, and 12. The stack test shall be performed at $\pm 10\%$ of the maximum steam rate of 250,000 pounds per hour.

g. Electrostatic Precipitator

(1) For Unit 3 the three-field electrostatic precipitator shall be designed and constructed to achieve a maximum emission rate of 0.03 grains per dscf or allow the installation of a fourth field in the event that the three-field ESP fails to perform as specified, or if other parameters of the Facility's operation are subsequently modified, necessitating additional control.

(2) For Units 1 and 2 the three-field electrostatic precipitators shall be designed and constructed to allow the installation of a fourth field in the event that the three-field ESPs fail to perform as specified, or if other parameters of the Facility's operation are subsequently modified, necessitating additional control.

h. Air Monitoring Program

- (1) The permittee shall install and operate continuously stack monitoring devices for oxygen and stack opacity. The monitoring devices shall meet the applicable requirements of Chapter 62-297, F.A.C., and 40 CFR 60.45, and 40 CFR 60.13, including certification of each device.
- (2) The permittee shall provide sampling ports into the stack and shall provide access to the sampling ports in accordance with Chapter 62-297, FAC.
- (3) The permittee shall have a sampling test of the stack emissions performed by a commercial testing firm within 90 days of the start of operation of the new boilers and annually from the date of testing thereafter.
- (4) The permittee shall operate two continuous SO₂ monitors and one continuous wind direction and velocity monitor in the immediate vicinity of the site. The monitors shall be specifically located as designated by the DEP and shall conform to 40 CFR 53. Monitoring shall begin upon commencement of operation.

2. The emissions limitations and other requirements contained in this subsection shall apply after the electrostatic precipitators in the Resource Recovery Facility are replaced with new air pollution control (APC) systems and compliance testing is completed.

a. Emission limits for each boiler are as follows:

- (1) Particulate matter (PM) emissions shall not exceed 0.012 grains/dry standard cubic feet (gr/dscf) corrected to 7% O₂, 14.4 lbs/hr/unit, and 63.1 tons/yr/unit.
- (2) PM emissions less than 10 microns in diameter (PM₁₀) shall not exceed 0.012 gr/dscf corrected to 7% O₂, 14.4 lbs/hr/unit, and 63.1 tons/yr/unit.
- (3) MWC Acid Gases

- (a) Sulfur dioxide (SO₂) emissions shall not exceed 31 parts per million by dry volume (ppmdv) corrected to 7% O₂ (24-hour daily geometric mean) or achieve 75% removal efficiency as a geometric mean value, whichever is less restrictive, with a not-to-exceed cap of 122 ppmdv corrected to 7% O₂; 0.372 lbs/MMBTU, 170.0 lbs/hr/unit, and 744.6 tons/yr/unit.
 - (b) Hydrogen chloride (HCl) emissions shall not exceed 31 ppmdv corrected to 7% O₂, or achieve 95% removal efficiency, whichever is less restrictive, with a not-to-exceed cap of 100 ppmdv corrected to 7% O₂; 0.174 lbs/MMBTU, 79.8 lbs/hr/unit, and 349.5 tons/yr/unit.
- (4) Carbon monoxide (CO) emissions shall not exceed 100 ppmdv corrected to 7% O₂ (4-hour arithmetic block average); 0.133 lbs/MMBTU, 61.0 lbs/hr/unit, and 267.2 tons/yr/unit.
- (5) MWC Metals
- (a) Mercury (Hg) emissions shall not exceed 70 micrograms/dry standard cubic meter (g/dscm) corrected to 7% O₂ or achieve 85% control, whichever is less restrictive, with a not-to-exceed cap of 100 μ g/dscm corrected to 7% O₂; 1.2×10^{-4} lb/MMBTU, 5.24×10^{-2} lbs/hr/unit, and 0.23 tons/yr/unit.
 - (b) Lead (Pb) emissions shall not exceed 490 μ g/dscm corrected to 7% O₂; 5.6×10^{-4} lbs/MMBTU, 0.257 lbs/hr/unit, and 1.13 tons/yr/unit.
 - (c) Cadmium (Cd) emissions shall not exceed 40 μ g/dscm corrected to 7% O₂; 4.6×10^{-5} lbs/MMBTU, 0.021 lbs/hr/unit, and 0.092 tons/yr/unit.

(6) MWC Organics

The polychlorinated dibenzo-p-dioxin (PCDD) and polychlorinated dibenzo-furans (PCDF) emissions shall not exceed 30 nanograms per dry standard cubic meter (ng/dscm) total mass corrected to 7% O₂; 3.44 x 10⁻⁸ lbs total mass/MMBTU, 1.6 x 10⁻⁵ lbs/hr/unit and 6.9 x 10⁻⁵ tons/yr/unit.

(7) Nitrogen oxides emissions (measured as NO₂) shall not exceed 200 ppm_{dv} corrected to 7% O₂; or 0.439 lb/MMBTU, 200.3 lb/hr/unit, and 877.3 tons/yr/unit. The permittee may request authorization from the Department to conduct nitrogen oxides emissions averaging pursuant to 40 CFR 60.33b.

(8) The opacity level in the stack shall not exceed 10% (six minute block average).

(9) The emission limitations for the modified Facility are based on the compliance methods specified for each pollutant. Any change in the specified compliance method for any pollutant may result in appropriate changes to the emission limitation for the pollutant.

b. Emissions Limitations for Minor Sources, after the retrofit is complete, are as follows:

(1) Visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) shall not occur in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period). This visible emissions limitation shall not apply during maintenance and repair of the ash conveying system.

(2) The particulate matter emissions shall not exceed 0.005 gr/dscf from the outlets of the baghouses at the lime storage silo, two activated carbon storage silos and the fly ash storage silo. Pursuant to Section 62-297.620(4), FAC, the particulate matter compliance test requirements are waived for these minor sources and an alternate standard of 5% opacity shall apply. A visible emission reading

greater than 5% opacity does not create a presumption that the emission limit (i.e., in gr/dscf) is being violated, but would require the permittee to perform a particulate stack test in accordance with EPA Methods contained in 40 CFR 60, Appendix A.

- (3) The particulate matter emissions shall not exceed 0.0102 gr/dscf from the outlet of the cyclone/wet scrubber system at the metals recovery system. Pursuant to Section 62-297.620(4), FAC, the particulate matter compliance test requirements are waived for this minor source and an alternate standard of 5% opacity shall apply. A visible emission reading greater than 5% opacity does not create a presumption that the emission limit (i.e., in gr/dscf) is being violated, but would require the permittee to perform a particulate stack test in accordance with EPA Methods contained in 40 CFR 60, Appendix A.

c. Operating Standards

- (1) After the modifications to the Resource Recovery Facility are complete, the height of the boiler stack shall not be less than 165 feet above the ground level at the base of the stack.
- (2) Each MWC unit shall be allowed to operate up to 110% of the unit's maximum demonstrated load capacity, as achieved during the most recent dioxin/furan compliance test. Maximum capacity shall be based on the steam (or feedwater) flow rate, which shall be continuously monitored according to the American Society of Mechanical Engineers (ASME) Power Test Code (PTC) for Steam Generating Units (PTC 4.1 and PTC 19.5) or as required by USEPA and/or FDEP regulations.
- (3) The incinerator boilers shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, rated capacity and certification number.
- (4) A Facility-specific maximum flue gas temperature at

the final PM control device inlet shall be established as demonstrated during the most recent dioxin/furan compliance test. The maximum demonstrated PM control device inlet temperature shall be established as the maximum 4-hr block average temperature measured during the most recent dioxin/furan compliance test. The MWC must then be operated such that the temperature of the final PM control device inlet does not exceed this level by more than 17° C (4-hour block basis).

- (5) The carbon injection rate must be calculated and maintained in compliance with the requirements set forth in 40 CFR 60.58b(m).
- (6) The chief Facility operator, shift supervisors, and control room operators shall complete USEPA or State MWC operator training courses in compliance with 40 CFR 60.54b.
- (7) The Facility operator shall develop a site-specific training manual and shall establish a training program to review the operating manual with each person who has responsibilities affecting the operation of the Facility. The manual and training shall be updated annually.

d. Compliance Requirements

The following compliance requirements shall apply after the Facility's new air pollution control systems are operational.

- (1) A Continuous Emissions Monitor (CEM) shall be used for the measurement of oxygen at each location where carbon monoxide (CO), sulfur dioxide (SO₂), or nitrogen oxide (NO_x) emissions are monitored. The monitor shall be installed, evaluated, and operated as required by 40 CFR 60.13. The monitor shall conform to Performance Specification 3 in 40 CFR 60, Appendix B. Quality assurance procedures shall conform to 40 CFR 60, Appendix F. The initial performance evaluation will be completed within 180 days after start-up of the modified Facility.

- (2) Compliance with PM emission limits shall be determined by USEPA Method 5. USEPA Method 1 shall be used to select sampling sites and number of traverse points. USEPA Method 3 shall be used for gas analysis. Compliance with the opacity limit shall be determined by USEPA Method 9. A minimum of three test runs shall be conducted under representative full load operating conditions. The average of these test runs shall be used to determine compliance. Compliance with PM10 emission limits shall be determined by using front half filterable PM10 particulate matter only. The initial compliance for PM emissions and opacity shall be conducted within 60 days after achieving maximum operating capacity, but no later than 180 days after start-up. Following the initial compliance test, performance tests for particulate and opacity shall be conducted on an annual basis (no more than 12 calendar months following the previous performance test).
- (3) A Continuous Opacity Monitor System (COMS) for measuring opacity shall be installed. Compliance shall be determined by USEPA Method 9. The output of the COMS shall be recorded on a six-minute block average basis. The COMS shall be installed, evaluated, and operated in accordance with 40 CFR 60.13, and will conform to Performance Specification 1 in 40 CFR 60, Appendix B. The initial performance evaluation shall be completed within 180 days after start-up.
- (4) Compliance with emission limits for cadmium (Cd), lead (Pb), and mercury (Hg) shall be determined by USEPA Method 29. A minimum sample volume of 1.7 cubic meters shall be obtained for the mercury test. Oxygen measurement shall be obtained simultaneously with each test run. The location and number of sampling points shall be determined by USEPA Method 1. USEPA Method 3 shall be used for the flue gas analysis. A minimum of three test runs shall be conducted under representative full load operating conditions. The average of these test runs shall be used to determine compliance. Initial

compliance tests shall be conducted within 60 days after achieving maximum operating capacity, but no later than 180 days after start-up. Following the completion of initial compliance testing, a performance test shall be conducted on an annual basis (no more than 12 calendar months following the previous performance test).

(5)

Sulfur Dioxide

Compliance with sulfur dioxide (SO₂) emission limits shall be determined by using Continuous Emissions Monitor (CEM) systems to measure SO₂ emissions and to calculate a 24-hour daily geometric mean emission concentration. CEM systems shall be used to measure inlet and outlet concentrations of SO₂. An oxygen measurement shall be obtained simultaneously with the SO₂ measurements. Compliance shall be determined based on the geometric mean of the hourly arithmetic average emission concentration during each daily 24-hour period measured between 12:00 midnight and the following midnight. The one-hour arithmetic averages shall be expressed as ppm_{dv} at 7% O₂, and shall be calculated using at least two data points. The CEM system shall be installed, evaluated, and operated in compliance with 40 CFR 60.13. The initial performance test shall be completed within 180 days after start-up. The CEM shall be operated in accordance with Performance Specification 2 in 40 CFR 60, Appendix B, and quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 in 40 CFR 60, Appendix F.

(6)

Nitrogen Oxides

Compliance with nitrogen oxides (NO_x) emissions limits shall be determined by use of a CEM system to measure NO_x and calculating a 24-hour daily arithmetic average. An oxygen measurement shall be obtained simultaneously with each measurement. Compliance with the NO_x emission limit shall be based on the arithmetic average of the hourly

emission concentration with the CEM system during each 24-hour daily period corrected to 7% O₂, measure between 12:00 midnight and the following midnight. At least two data points shall be used to calculate the one-hour arithmetic average. The CEM installation, evaluation, and operation shall follow the procedures set forth in 40 CFR 60.13. The CEM shall be operated according to Performance Specification 2 in 40 CFR 60, Appendix B. Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 in 40 CFR 60, Appendix F. The initial evaluation shall be completed within 180 days of the initial start-up.

(7)

Hydrogen Chloride

Compliance with hydrogen chloride (HCl) emission limits shall be determined by USEPA Method 26. The minimum sampling time shall be one hour. A minimum of three test runs shall be conducted under representative full load operating conditions. The average of these test runs shall be used to determine compliance. Oxygen measurement shall be obtained simultaneously with each test run. Initial compliance tests shall be conducted within 60 days after achieving maximum operating capacity, but no later than 180 days after start-up. Thereafter, annual performance tests shall be conducted to verify compliance.

(8)

Dioxins/Furans

Compliance with emission limits for dioxin/furan shall be determined by USEPA Method 23. The minimum sample time for each test run shall be four hours. Oxygen measurement shall be obtained simultaneously with each test run. A minimum of three test runs shall be conducted under representative full load operating conditions. The average of these test runs shall be used to determine compliance. The initial compliance test shall be conducted within 60 days after achieving maximum operating capacity, but no later than 180 days after

start-up. Thereafter, compliance shall be demonstrated by annual stack tests. If all three units achieve an emissions level of 15 ng/dscm corrected to 7% O₂ for two consecutive years, the permittee may request authorization from the Department to perform subsequent annual stack tests on only one unit per year.

(9) Carbon Monoxide

Compliance with carbon monoxide (CO) emission limits shall be determined by a CEM system for measuring CO at the combustor outlet using a four-hour block arithmetic average. The CEM system shall be operated according to Performance Specification 4A in 40 CFR 60, Appendix B. The four-hour arithmetic average (expressed as ppm_{dv} at 7% O₂) shall be calculated from one-hour arithmetic averages with the use of at least two data points. Required data shall consist of valid paired hourly averages (i.e., CO and O₂). Quarterly accuracy determinations and daily calibration drift tests for CEM shall be performed in accordance with Procedure 1 in 40 CFR 60, Appendix F.

e. Operating Requirements for the Modified Facility

After the new APC systems are operational and the other modifications to the Resource Recovery Facility are complete, the Facility shall comply with the following operating requirements:

(1) MWC Load Level

Compliance with MWC load level requirements shall be determined by a steam flow meter using the American Society of Mechanical Engineers (ASME) Power Test Code Method 4.1. Steam flow shall be calculated in four-hour block arithmetic averages. The design, construction, installation, and calibration of the steam flow meter shall be based on ASME Test Code 19.5. The maximum demonstrated MWC unit load shall be determined during the initial compliance test for dioxins/furans and each subsequent compliance test, during which

compliance with dioxin/furan limits are achieved. The maximum demonstrated MWC unit load shall be the maximum four-hour arithmetic average load achieved during the most recent test during which compliance with the dioxin/furan emission limit was achieved.

(2) Particulate Matter Control Device Temperature

Compliance with maximum particulate matter (PM) control device temperature requirements shall be determined by a device to measure temperature on a continuous basis at the inlet to the final PM control device. Temperature shall be calculated in four-hour block arithmetic averages. The maximum demonstrated PM control device temperature shall be determined during the initial compliance test for dioxins/furans and each subsequent test during which compliance with the dioxins/furan emission limit is achieved. The maximum PM control device temperature shall be the maximum four-hour arithmetic average temperature achieved at the final PM control device inlet during the most recent test which compliance with the dioxin/furan limit was achieved.

(3) MWC Unit Capacity

The MWC unit capacity shall be calculated based on 24 hours of operation at the maximum design charging rate.

(4) Fly Ash/Bottom Ash Fugitive Emissions

Compliance with the fly ash/bottom ash fugitive emission standards shall be determined by USEPA Method 22. The minimum observation time shall be three hours. The observation period shall include times when the Facility will transfer ash from the MWC unit to the ash storage area and times when the ash will be loaded for disposal. However, the fugitive emission standard does not apply during maintenance and repair of the ash conveying systems. Initial compliance tests shall be conducted

within 60 days after achieving maximum operating capacity, but no later than 180 days after start-up.

3. Reporting Requirements

a. Two copies of the results of the stack tests shall be submitted within sixty days of testing to the Florida DEP Southwest Florida District Office.

b. Stack monitoring shall be reported to the DEP Southwest District Office on a quarterly basis in accordance with Section 62-297, FAC, and 40 CFR, Part 60, Subsection 60.7.

B. Fuel

The fuel used in the Resource Recovery Facility shall consist of municipal solid waste, as defined in 40 CFR 60.51a, and the other non-hazardous solid wastes described in the permittee's 1995 application for a modification. Natural gas may be used as a supplemental fuel during startups, shutdowns, and at other times when necessary and consistent with good combustion practices. Use of alternate fuels would necessitate an amendment of the County's application or a modification of these Conditions of Certification, as determined by the Department.

C. Cooling Tower

1. Makeup Water Constituency

The Resource Recovery Facility shall utilize only treated sewage effluent, or stormwater runoff from the stormwater holding pond, as cooling tower makeup water. The effluent shall have received prior to use in the tower, as a minimum, secondary treatment, as well as treatment described in Condition XIV.C.2. below. Use of waters other than treated sewage effluent or site stormwater, i.e., higher quality potable waters or lower quality less-than-secondarily treated sewage effluent, will require a modification of conditions agreed to by the Southwest Florida Water Management District and the Department and must be approved by the Governor and Cabinet.

2. Chlorination

Chlorine levels in the cooling tower makeup water shall continuously be monitored, prior to insertion in the cooling towers. Sewage effluent used as makeup shall be treated as necessary to maintain a 1.0 mg/liter total chlorine residual after fifteen minutes contact time. Chlorination should occur at an effluent turbidity of 5 Nephelometric Turbidity Units or less.

3. Special Studies

Upon satisfactory demonstration to the Department that the number of viruses entering the towers in the effluent makeup from the upgraded Largo Plant can be reduced to an undetectable level with the use of a lesser amount of chlorination, the above requirement may be altered to 1.0 mg/liter total chlorine residual after a 15 minute contact time or alternate levels as approved by the Department. This demonstration may occur through performance of special studies approved by the Department. Alteration of the chlorination requirements must still insure adequate treatment for the control of bacterial growth in the cooling towers.

D. Water Discharges

1. Surface Water

a. Any discharges from the site stormwater/leachate treatment system via the emergency overflow structure which result from an event LESS than a ten-year, 24-hour storm (as defined by the U.S. Weather Bureau Technical Paper No. 40, or the DOT drainage manual, or similar documents) shall meet State Water Quality Standards, as contained in Chapter 62-302, F.A.C.

b. Leachate, stormwater, or other site wastewaters which are to be spray irrigated shall be treated to conform to any rules promulgated by the State for the land application of wastewaters in areas not commonly accessible to the public.

c. Cooling tower blowdown shall not be discharged to surface water.

d. Upon satisfactory demonstration to the Department that surface water quality will not be deteriorated, a special pilot operation, in the field, to determine the environmental effect of land application of process blowdown water from the Resource Recovery Facility may be allowed. This demonstration will require submittal of background and system design data, and provisions for monitoring as approved by the Department.

2. Groundwaters

The 20 acre certified site and an adjacent landfill are located inside a slurry wall, which separates the ground and surface waters on the site from off-site areas. The permittee's discharges to groundwater on the certified site shall be restricted by the applicable conditions of the permits and regulations that govern the permittee's activities inside the slurry wall and shall be monitored in accordance with the groundwater monitoring plan for the landfill adjacent to the certified site.

3. Groundwater Monitoring Program

Groundwater monitoring for the certified site shall be performed in the manner prescribed in the FDEP approved groundwater monitoring plan for the landfill that is located within the permittee's slurry wall and adjacent to the certified site.

E. Solid/Hazardous Waste

1. Operation of the associated landfill shall be done in accordance with the landfill's current solid waste operation permit and all applicable portions of Chapters 62-701 and 62-702, FAC, including prohibitions, procedures for closing of the landfill, and final cover requirements, or as provided in this condition (XIV.E.) in its entirety.
2. Putrescible wastes received at the landfill shall receive daily cover. No cover shall be required for the landfilling of only ash or construction/demolition debris. Daily cover shall consist of a six inch layer of compacted earth or other material approved by the DEP placed at the end of each working day.
3. Rodent and insect control shall be provided as necessary to protect the health and safety of site employees and the public. Pesticides used to control rodents, flies, and other vectors shall be as specified by the Florida Department of Agriculture and Consumer Services.
4. A monthly report shall be prepared detailing the amount and type (putrescible, special wastes, boiler residue, etc.) of materials landfilled at the site, and the treatment provided (see condition XIV.E.2. above). These reports shall be furnished to the DEP Southwest District Office quarterly, commencing 120 days after the Resource Recovery Facility becomes operational and is producing residues.
5. Unless approved by the Department with subsequent modification of conditions, the Resource Recovery Facility shall not accept materials currently defined as "Hazardous Wastes" in Chapter 62-730, F.A.C.
6. If residue material are determined to be a "Hazardous Waste", then measures shall be taken to treat or dispose of the residues pursuant to rules promulgated by either Federal or State authorities.
7. If the nature of materials received at the Facility becomes altered, either due to modification of conditions, i.e., the Facility is allowed to incinerate already known hazardous wastes such as pesticides, or if groundwater monitoring reveals unusual conditions which may be attributable to the landfilling of this residue, then a subsequent analysis may be required at that time.
8. There shall be no discharge to the environment of polychlorinated biphenyl

compounds.

F. Operational Safeguards

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

G. Transmission Lines

The directly associated transmission lines from the Resource Recovery Facility electric generators to the Florida Power Corporation Gandy Substation shall be kept cleared without the use of herbicides.

H. Noise

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

XV. CONDITIONS FOR ADDITIONAL AIR EMISSION SOURCES

A. AUXILIARY FOSSIL FUEL BOILER

1. The auxiliary fossil fuel boiler is subject to and must meet the applicable requirements of the federal New Source Performance Standards (NSPS), 40 CFR 60, Subpart Dc: Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60.40c through 60.48c. The fuel oil storage tank is subject to the recordkeeping provisions of 40 CFR 60.116b (a) and (b) in NSPS Subpart Kb: Volatile Organic Liquid Storage Vessels. [Rule 62-204.800(7)(b), F.A.C. and 40 CFR 60, Subparts Dc and Kb].

2. The maximum permitted hours of operation for the auxiliary boiler are not limited (i.e., up to 8760 hours per year allowed).

3. The auxiliary boiler is permitted to fire only the following fuels and at the maximum rates shown:

Fuel	Max. % Sulfur	Max. mmBtu/hr	Max. Fuel Usage
Natural Gas	--	99.44	94.7 Mcf/hour
#2 Fuel Oil *	0.05% by wt	96.16	702 gal/hour

* New No. 2 Fuel oil only (waste or recycled oil is not allowed)

[PPSA permit application dated 4/96, and BACT Determination made in accordance with Rule 62-296.406(2) and (3), F.A.C.]

(NSPS Note: The sulfur content limitation of this BACT Determination is more stringent than and therefore meets the requirements of the 40 CFR 60 Subpart Dc standard for sulfur dioxide contained in 40 CFR 60.42c(d).)

4. Visible emissions shall not exceed 20% opacity, except for one six-minute period per hour during which opacity shall not exceed 27%.

[Rule 62-296.406(1), F.A.C.]

5. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C. and Pinellas County Ordinance No. 89-70, Subpart 6.620, as amended]

6. The auxiliary boiler stack shall be tested for NO_x during the initial performance test and thereafter at permit renewal time. The NO_x emissions shall not exceed 8.95 lbs/hr and 39.20 tons/yr. Compliance with NO_x emission limits shall be determined by USEPA Method 7, 7E, or equivalent. Test reports shall be submitted to the Air Programs Section of the Southwest District Office of the Department and the Pinellas County Department of Environmental management within 45 days of the testing. (Rules 62-297.310(7)(a)1, and 62-297.310(8), F.A.C.)

7. The auxiliary boiler stack shall be tested for visible emissions (VE) within 30 days after first being placed in operation and annually thereafter. Initial VE testing shall be performed while firing No. 2 fuel oil if No. 2 fuel oil is to be utilized in the auxiliary boiler; otherwise initial VE testing shall be performed while firing natural gas. If initial VE testing is performed with natural gas, then VE testing with No. 2 fuel oil is required in accordance with the provisions of this permit and applicable regulations within 30 days after No. 2 fuel oil is first fired in the boiler. Test reports shall be submitted to the Air Programs of the Southwest District Office of the Department and the Pinellas County Department of Environmental Management within 45 days of the testing. [Rules 62-297.310(7)(a)1, and 62-297.310(8), F.A.C.]

8. Compliance with the visible emission limitation in Condition XV.A.4, above, shall be determined using DEP Method 9 contained in Rule 62-297.401, F.A.C. The visible emissions test shall be conducted by a certified observer and be a minimum of sixty (60) minutes in duration. The visible emissions test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. The minimum requirements for stationary point source emission test procedures and reporting shall be in accordance with Rule 62-297, F.A.C. and 40 CFR 60 Appendix A. [Rule 62-297, F.A.C.]

9. Testing of emissions shall be conducted during operation of the auxiliary boiler within

90-100% of the maximum permitted fuel heat input rate of 96.16 mmBtu/hour (702 gallons/hour) for fuel oil or 99.44 mmBtu/hour (94.7 Mcf/hour) for natural gas, when feasible. A compliance test submitted at a rate less than 90% of the maximum permitted rate will automatically constitute an amended permitted heat input rate at that lesser rate plus 10%. Within 30 days of that lower amended permitted rate being exceeded, a new compliance test shall be conducted at the higher rate. The test results shall be submitted to the Department and the Air Program of the Pinellas County Department of Environmental Management within 45 days of testing. Acceptance of the test by the Department will automatically constitute an amended permit at the higher tested heat input rate plus 10%, but in no case shall the maximum permitted heat input rate of 96.16 mmBtu/hour for No. 2 fuel oil or 99.44 mmBtu/hour for natural gas be exceeded. The fuel type and heat input rate during the test shall be included with each test report. Failure to submit the required fuel information or operating under conditions that are not representative of normal operating conditions may invalidate the test and fail to provide reasonable assurance of compliance. [Rule 62-4.070(3), F.A.C.]

10. The permittee shall notify the Air Program of the Pinellas County Department of Environmental Management at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted. [Rule 62-297.310(7)(a)9, F.A.C.]

11. Subsequent to conducting the initial compliance test the permittee will be required to conduct an annual visible emissions compliance test (however, see Condition XV.A.11., below): If fuel oil has been used in this boiler for more than 400 hours during the 12 month period prior to the required annual compliance test, or if it is expected to be used in this boiler for more than 400 hours during the next 12 month period, then the annual VE test shall be conducted while firing No. 2 fuel oil. The permittee shall submit a statement of the fuel heat input rate and a description of the fuel in use as a part of any compliance test report. Failure to submit the heat input rate or fuel oil sulfur content may invalidate the test and fail to provide reasonable assurance of compliance. [Rule 62-4.070(3), F.A.C.]

12. Annual visible emissions compliance tests can be waived, on a year by year basis, if fuel oil has not been used in this boiler for more than 400 hours for the previous 12 months and if it is not expected to be used in this boiler for more than 400 hours during the next 12 months, except that, regardless of fuel used, a VE test shall be conducted during the 6 months period prior to applying for renewal of the operation permit. Each year when the VE test is due, if this test waiver provision is invoked, a letter must be sent to the Air Compliance Sections of the Southwest District Office of the Department and the Pinellas County Department of Environmental Management stating that the above requirements for the waiver have been satisfied. This notification letter shall include a statement of the number of hours that fuel oil was fired during the last 12 month period, and, if fuel oil was fired for any period during the last 12 months, a copy of the most recent fuel records that document compliance with the percent sulfur content limit in accordance with Condition XV.A.15, below. [Rules 62-297.310(7)(a) 3 and 5, F.A.C.]

13. Compliance with the fuel sulfur content requirements of Condition XV.A.3., above, shall be demonstrated during any VE test conducted while burning oil, by submitting either of the following with the VE test report:

- A. copy of a fuel oil analysis from your fuel oil supplier representative of the oil used during the compliance test;
- B. results of the fuel oil analysis for an as-burned fuel oil sample taken during the compliance test.

Fuel sampling and analysis shall be in accordance with 40 CFR 60 Appendix A, Method 19, Section 5.2.2 (Liquid Fossil Fuel). [Rules 62-4.070(3), & 62-204.800(7)(e), F.A.C., & 40 CFR 60.44c(g) & (h)]

14. In order to document compliance with the requirements of Conditions XV.A.2, 3, and 11, the permittee shall maintain a record of the type of fuel (natural gas or No. 2 oil) used in the auxiliary boiler during each period of operation. The records shall include the total hours of operation for each period of burning No. 2 oil with a monthly total of oil-fired operating hours for the boiler for each calendar month. These records shall be recorded in a permanent form suitable for inspection upon request, and shall be retained for at least a two year period. [Rule 62-4.070(3), F.A.C.]

15. The permittee shall maintain a (daily) record of the quantity of each fuel used in the boiler for each day of operation. These records shall be recorded in a permanent form suitable for inspection upon request, and shall be retained for at least a two year period. [Rule 62-204.800, F.A.C., and 40 CFR 60.48c(g) & 60.48c(i)]

16. Ongoing compliance with the fuel oil sulfur content requirements of Condition XV.A.3 shall be demonstrated through fuel supplier documentation of fuel oil sulfur content for each shipment of oil delivered for use in the boiler. Fuel sampling and analysis shall be in accordance with 40 CFR 60 Appendix A, Method 19, Section 5.2.2 (Liquid Fossil Fuel). (See Condition XV.A.18) The records shall include a "fuel supplier certification" (40 CFR 60.48c(f)) consisting of the name of the oil supplier and a statement from the oil supplier that the oil complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, "*Standard Specification for Fuel Oils*". These records shall be recorded in a permanent form suitable for inspection upon request, and shall be retained for at least a two year period. [Rule 62-4.070(3), F.A.C., and 40 CFR 60.46c(e), 60.48c(e)(11), 60.48c(f) and 60.48c(i)]

17. The permittee shall keep readily accessible records showing the dimensions of the fuel oil storage tank and an analysis showing the capacity of the storage tank. The records shall be kept for the life of the storage tank. [Rule 62-204.800, F.A.C., and 40 CFR 60.116b(a) and 60.116b(b)]

18. The permittee shall provide the Air Programs of the Southwest District Office of the Department and the Pinellas County Department of Environmental Management the following written notifications in accordance with 40 CFR 60.48c(a):

- A. Start of Construction - Provide the date construction begins on the auxiliary boiler, within thirty (30) days of that date.
- B. Initial Startup - Provide the estimated date of the initial startup of the auxiliary boiler, not more than sixty (60) days nor less than thirty (30) days prior to such date.
- C. Startup - Provide the actual date of the initial startup of the auxiliary boiler, not more than fifteen (15) days after such date. This notification shall include a statement confirming the design heat input rate of the boiler and the fuels to be combusted in the boiler.

[Rule 62-204.800, F.A.C., and 40 CFR 60.48c(a)]

19. The permittee shall submit quarterly reports of the fuel supplier sulfur content certification records required by Condition XV.A.15. In addition to the above, the quarterly report shall include a certified statement signed by the owner or operator of the Facility that the records of the fuel supplier certifications submitted represent all of the fuel combusted during the quarter. The quarterly reports shall be submitted to the Air Quality Division of the Pinellas County Department of Environmental Management within 30 days of the end of the quarter being reported. [Rule 62-204.800, F.A.C., and 40 CFR 60.48c(e)(11)]

20. The permittee shall include emissions from the auxiliary boiler and fuel oil storage tank in DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility," submitted to the Air Program of the Pinellas County Department of Environmental Management for the Facility each calendar year on or before March 1 for the preceding calendar year.

**BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

In Re: Pinellas County Resource)	
Recovery Facility (Units 1-3))	OGC CASE NO. 98-1335
Modification of Conditions)	DEP FILE NOS. PA 78-11C
of Certification)	and PA 83-18
Pinellas County, Florida)	
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**FINAL ORDER MODIFYING
CONDITIONS OF CERTIFICATION**

The Governor and Cabinet, sitting as the Siting Board, issued a final order on July 20, 1979, approving certification of Units 1 and 2, and then issued a final order on March 20, 1984, approving certification of Unit 3, of the Pinellas County Resource Recovery Facility. Those certification orders approved the construction and operation of a municipal solid waste-fired, resource recovery power plant and associated facilities located in Pinellas County, Florida. The certification has been previously modified by Department orders on July 28, 1986, and July 29, 1996.

On September 15 and December 1, 1997, Pinellas County filed requests to amend the conditions of certification pursuant to Section 403.516(1)(b), Florida Statutes. Pinellas County requested that the conditions be modified to: (1) allow replacement of the flyash storage silo with two flyash surge bins; (2) add EPA Method 26A for testing of hydrochloric acid emissions; (3) increase the allowable size of the auxiliary burners, increase the NO_x emission factor, and increase the permitted annual consumption of natural gas for the auxiliary burners; and (4) allow construction of ventilation fans in ash handling and storage areas.

Copies of Pinellas County's proposed modifications were made available for public review on October 3, 1997, on which date a Notice of Intent to Issue Proposed Modification of Power Plant Certification was also published in the Florida Administrative Weekly. On September 15 and December 8, 1997, all parties to the original proceeding were served by mail with copies of the intents to modify and supporting documentation. The notice specified that a hearing would be held if a party to the original certification hearing objected within 45 days from receipt of the

proposed modifications or if any other person whose interests would be substantially affected objected in writing within 30 days after issuance of the public notice. No written objection to the proposed modifications has been received by the Department. Accordingly, in the absence of any timely objection,

IT IS ORDERED:

The proposed changes to the Pinellas County Resource Recovery Facility as described in its September 15, and December 1, 1997, requests for modification are **APPROVED**. Pursuant to Section 403.516(1)(b), F.S., the conditions of certification for the Pinellas County Resource Recovery Facility are **MODIFIED** as follows:

XIV.A. Air

1. No change.

2. The emissions limitations and other requirements contained in this subsection shall apply after the electrostatic precipitators in the Resource Recovery Facility are replaced with new air pollution control (APC) systems and compliance testing is completed.

a. Emission limits for each boiler are as follows:

(1 through 6) No change.

(7) Nitrogen oxides emissions (measured as NO₂) shall not exceed 205 ~~200~~ ppm_{dv} corrected to 7% O₂; or 0.450 ~~0.439~~ lb/MMBTU, 205.3 ~~200.3~~ lb/hr/unit, and 899.2 ~~877.3~~ tons/yr/unit. The permittee may request authorization from the Department to conduct nitrogen oxides emissions averaging pursuant to 40 CFR 60.33b.

(8) and (9) No change.

b. Emissions Limitations for Minor Sources, after the retrofit is complete, are as follows:

(1) No change.

(2) The particulate matter emissions shall not exceed 0.005 gr/dscf from the outlets of the baghouses at the lime storage silo, and two activated carbon storage silos ~~and the flyash storage silo~~. Pursuant to Section 62-297.620(4), FAC, the particulate

matter compliance test requirements are waived for these minor sources and an alternate standard of 5% opacity shall apply. A visible emission reading greater than 5% opacity does not create a presumption that the emission limit (i.e., in gr/dscf) is being violated, but would require the permittee to perform a particulate stack test in accordance with EPA Methods contained in 40 CFR 60, Appendix A.

(3) No change.

(4) The particulate matter emissions shall not exceed 0.03 gr/dscf from the outlet of the wet scrubber system at the ash conditioning building. Pursuant to Section 62-297.620(4), F.A.C., the particulate matter compliance test requirements are waived for this minor source and an alternative standard of 5% opacity shall apply. A visible emission reading greater than 5% does not create a presumption that the emission limit (i.e., in gr/dscf) is being violated, but would require the permittee to perform a stack test in accordance with EPA Methods contained in 40 CFR 60, Appendix A.

c. Operating Standards - No change.

d. Compliance Requirements

(1 through 6) No change.

(7) Hydrogen Chloride


Compliance with the hydrogen chloride (HCL) emission limits shall be determined by USEPA Method 26 or 26A. The minimum sampling time shall be one hour. A minimum of three test runs shall be conducted under representative full load operating conditions. The average of these test runs shall be used to determine compliance. Oxygen measurement shall be obtained simultaneously with each test run. Initial compliance tests shall be conducted within 60 days after achieving maximum operating capacity, but no later than 180 days after start-up. Thereafter, annual performance tests shall be conducted to verify compliance.

(8) and (9) No change.

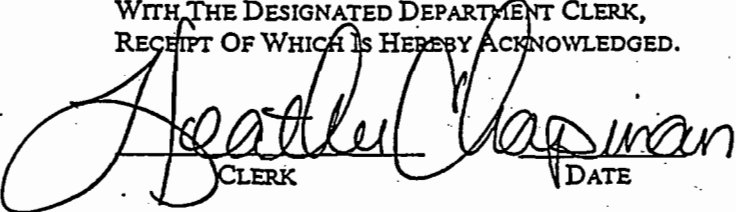
Any party to this Notice has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, M.S.35, Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fee with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date that this Final Order is filed with the Department of Environmental Protection.

DONE AND ORDERED this 19th day of ~~April~~^{May} 1998, in Tallahassee, Florida.

STATE OF FLORIDA, DEPARTMENT
OF ENVIRONMENTAL PROTECTION


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

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 DATE 5/20/98

CERTIFICATE OF SERVICE

I HEREBY CERTIFY this 26 day of May 1998, that a true and correct copy of the foregoing has been sent by mail to the following listed persons:

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