CDM Camp Dresser & McKee

Application

Hillsborough County Solid Waste Energy Recovery Facility

Application for Amendment of Power Plant Site Certification

Air Pollution Control Equipment Retrofit

Volume III

Application for Air Permit-Long Form
DEP Form No. 62-210.900(1)

September 1997

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DEP Form No. 62-210.900(1)

Prepared by

Camp Dresser & McKee Inc.
Tampa, Florida

RTP Environmental Associates Inc.
Green Brook, New Jersey

September 1997

Department of
Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Identification of Facility Addressed in This Application

1. Facility Owner/Company Name : Hillsborough County
2. Site Name : Hillsborough County SWERF
3. Facility Identification Number : 0570261 [ ] Unknown
4. Facility Location : Hillsborough County Solid Waste Energy Recovery Facility Street Address or Other Locator : 350 Falkenburg Road City : Tampa County : Hillsborough Zip Code : 33619-
5. Relocatable Facility? [ ] Yes [X] No 6. Existing Permitted Facility? [X] Yes [ ] No

DEP Form No. 62-210.900(1) - Form
Effective : 3-21-96

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official :

Name : Daniel A. Kleman
Title : County Adminstrator

2. Owner or Authorized Representative or Responsible Official Mailing Address :

Organization/Firm : Hillsborough County
Street Address : 601 E. Kennedy
City : Tampa
State : FL Zip Code : 33602-____

3. Owner/Authorized Representative or Responsible Official Telephone Numbers :

Telephone : (813)276-2909 Fax : (813)276-2960

4. Owner/Authorized Representative or Responsible Official Statement :

I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, 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. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained 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. 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 units.*

Signature Daniel A. Kleman by Pat Bean Date 9/12/97

* Attach letter of authorization if not currently on file.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type
001	Municipal Waste Combustor - Unit #1	
002	Municipal Waste Combustor - Unit #2	
003	Municipal Waste Combustor - Unit #3	
004	MWC Auxiliary Burner - Unit #1	
005	MWC Auxiliary Burner - Unit #2	
006	MWC Auxiliary Burner - Unit #3	
007	Ash Building and Handling Systems	
008	Lime Silo	
009	Carbon Silo	

Purpose of Application and Category

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 :

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.

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.

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 Fule 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.

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 :

[X] 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 :

Power Plant Site Certification PPSA #83-19. PSD Air Permit PSD-FL-121(A).

[ ] 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 :

[X] Attached - Amount : $10000.00 [ ] Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations : Replacing the air pollution control equipment. The existing electrostatic precipitators will be replaced with spray dryer absorbers, fabric filters, activated carbon injection and selective non-catalytic reduction system.
2. Projected or Actual Date of Commencement of Construction : 01-May-1998
3. Projected Date of Completion of Construction : 01-Oct-2000

Professional Engineer Certification

1. Professional Engineer Name : Douglas W. Fredericks Registration Number : 44261
2. Professional Engineer Mailing Address : Organization/Firm : Camp Dresser & McKee Street Address : 1715 North Westshore Blvd. City : Tampa State : FL Zip Code : 33607-____
3. Professional Engineer Telephone Numbers : Telephone : (813)281-2900 Fax : (813)288-8787

4. Professional Engineer Statement :

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

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollutant 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; and

(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.

If the purpose of this application is to obtain a Title V source air operation permit (check here [ ] if so), I further certify 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.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X] if so), I further certify that 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.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions 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.

Signature

9/11/97
Date

* Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact :

Name : Douglas W. Fredericks
Title : Project Engineer

2. Application Contact Mailing Address :

Organization/Firm : Camp Dresser & McKee
Street Address : 1715 N Westshore Blvd Suite875
City : Tampa
State : FL Zip Code : 33607-

3. Application Contact Telephone Numbers :

Telephone : (813)281-2900 Fax : (813)288-8787

Application Comment

The Hillsborough County Solid Waste Energy Recovery Facility (Facility) is a Power Plant Siting Act (PPSA) facility. The Facility has three Municipal Waste Combustors (MWC) each with a maximum daily charging rate of 440 tons per day of municipal solid waste having a heat content of 4,500 Btu/lb. The MWCs were permitted as PPSA No. 83-19. The facility PSD Permit No. is PSD-FL-121(A). Air quality requirements are contained in the current PPSA Conditions of Certification. The emissions are currently controlled by Electrostatic Precipitators (ESPs).

The County is proposing to install new APC equipment. The Retrofit will allow the Facility to meet the new emissions limits and monitoring requirements established by EPA's EG for Large Municipal Waste Combustors (MWC), which are codified in 40 CFR Subpart Cb and adopted by FDEP in FAC 62-204.800(8).

The proposed improvements to the APC equipment consist of replacing the existing ESPs with SDAs and FFs, and adding ACI systems and SNCR systems. The new APC equipment will require storage silos for lime and carbon, and a storage tank for ammonia or urea. PM emissions during silo filling operations will be controlled with FF dust collectors.

With this application, the County is requesting amendments to its existing air permit [PSD-FL-121(A)] and authorization to proceed with construction of the Retrofit in compliance with the EG. Revisions to the existing PSD permit either required by the EG or requested by the County include:

- New emission limits and/or averaging times for all pollutants, including emission limits for pollutants not

currently regulated by the existing permit (dioxins/furans, hydrogen chloride [HCl], cadmium [Cd], and ammonia [NH3]);

- CEM for sulfur dioxide (SO2), nitrogen oxides (NOx), and CO not currently required under the existing permit;

- Annual compliance tests for pollutants not measured by CEM, as required by the EG, (PM, lead [Pb], mercury [Hg], Cd, HCl, and dioxins/furans for the MWCs, and opacity for the MWCs, fugitive flyash sources, and storage silos), including some new pollutants and monitoring methods not included in the existing permit; and

- Real-time, continuous monitoring of processing parameters indicative of good combustion practices (GCP) (steam or feedwater flow to precisely monitor MWC load, economizer outlet temperature, and PM control device inlet temperature) to minimize MWC organic emissions as well as other parameters such as carbon injection rates to ensure compliance with Facility-specific requirements established by compliance tests.

In addition to the EG requirements, the County is proposing the following additional revisions to the existing PSD permit for the Facility which are consistent with maintaining no net increase in the Facility's maximum potential to emit, current industry practices, and EG definitions:

- Replacement of the VOC limit with the EG requirement for GCP and continuous CO monitoring.

- Adjustement of currently permitted concentration limits for HF and Be to be corrected to 7 percent O2, and to maintain current maximum potential ton-per-year emission rates for these pollutants.

- More accurate definition of the types of fuels allowed to be processed at the Facility consistent with the EG definition of MSW;

- More complete description of the allowable MWC operating conditions which recognizes unit operations under a range of solid waste heat contents;

- Restricting auxiliary burner natural gas usage in each MWC to less than 10 percent of the total annual gross heat input to obviate the NOx monitoring and reporting requirements under 40 CFR 60 Subpart Db;

- Requirement to determine the amount of solid waste combusted shall be determined on a daily average basis for each MWC using the Facility's truck scale weight data for a calendar month and MWC operating data for the same calendar month.

- Requirement to conduct compliance testing at the "maximum demonstrated MWC unit load," expressed as steam or feed water flow, recorded for 4 consecutive hours during the most recent dioxin/furan performance test in which compliance with the dioxin/furan emissions limit was achieved.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility, Location, and Type

1. Facility UTM Coordinates : Zone : 17 East (km) : 368.20 North (km) : 3092.70			
2. Facility Latitude/Longitude : Latitude (DD/MM/SS) : 27 57 14 Longitude (DD/MM/SS) : 82 20 22			
3. Governmental Facility Code : 3	4. Facility Status Code : A	5. Facility Major Group SIC Code : 49	6. Facility SIC(s) : 4953
7. Facility Comment :			

Facility Contact

1. Name and Title of Facility Contact : John Burbridge Plant Manager
2. Facility Contact Mailing Address : Organization/Firm : Ogden Martin Systems of Hills. Inc. Street Address : 350 Falkenburg Road City : Tampa State : FL Zip Code : 33619-____
3. Facility Contact Telephone Numbers : Telephone : (813)684-5688 Fax : (813)684-7964

Facility Regulatory Classifications

1. Small Business Stationary Source?	N
2. Title V Source?	Y
3. Synthetic Non-Title V Source?	N
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	Y
5. Synthetic Minor Source of Pollutants Other than HAPs?	N
6. Major Source of Hazardous Air Pollutants (HAPs)?	Y
7. Synthetic Minor Source of HAPs?	N
8. One or More Emissions Units Subject to NSPS?	Y
9. One or More Emission Units Subject to NESHAP?	N
10. Title V Source by EPA Designation?	Y
11. Facility Regulatory Classifications Comment :	

B. FACILITY REGULATIONS

Rule Applicability Analysis

Volume 2, Section 2, of this application contains the Rule Applicability Analsysis.

B. FACILITY REGULATIONS

List of Applicable Regulations

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(5) Required Stack Sampling Facilities

FAC 62-297.310(6) Frequency of Compliance Tests

FAC 62-297.310(7) Test Reports

40 CFR 50 Ambient Air Quality Standards

40 CFR 52 Subpart K Approval and Promulgation of Implementation Plans, Florida

40 CFR 82 Protection of Stratospheric Ozone

FAC 62-4 Permits

FAC 62-103 Rules of Administrative Procedure

FAC 62-210 Stationary Sources - General Requirements

FAC 62-210.300 Permits Required

B. FACILITY REGULATIONS

List of Applicable Regulations

FAC 62-210.300(3)(a)5 Exemption for internal combustion engines

FAC 62-210.300(3)(a)16 Exemption for brazing, soldering or welding equipment

FAC 62-210.300(3)(A)20-21 Exemption for emergency electrical generators, heating units, etc.

FAC 62-210.300(5) Notification of Startup

FAC 62-210.300(6) Emission Unit Reclassification

FAC 62-210.350 Public Notice and Comment

FAC 62-210.350(3) Addtional Public Notice Requirements for Title V Sources

FAC 62-210.360 Administrative Permit Corrections

FAC 62-210.370(3) Annual Operating Reports

FAC 62-210.550 (GEP) Stack Height Policy

FAC 62-210.650 Circumvention

FAC 62-210.700 Excess Emissions

FAC 62-210.900 Forms and Instructions

FAC 62-212 Stationary Sources - Preconstruction Review

FAC 62-213 Operating Permits for Major Sources of Air Pollution

B. FACILITY REGULATIONS

List of Applicable Regulations

FAC 62-256 Open Burning and Frost Protection Fires

FAC 62-296 Stationary Sources Emissions Standards (as listed below)

FAC 62-296.320(2) Objectionable Odor Prohibited

FAC 62-296.320(3) Industrial, Commercial and Municipal Open Burning Prohibited

FAC 62-296.320(4)(c) Unconfined Emissions of Particulate Matter

FAC 62-296.416(3)(e) Specific Emission Limiting and Performance Standards for Mercury

Exemptions from Regulations for Facilty and Specific Emissions Units:

FAC 62-296.320(4)(a) General Particulate Emission Limiting Standards NOT APPLICABLE

FAC 62-296.500 RACT- VOC and NOx Emitting Facilities NOT APPLICABLE

FAC 62-296.600 RACT - Lead NOT APPLICABLE

FAC 62-296.700 RACT - Particulate matter NOT APPLICABLE TO ASH HANDLING SYSTEMS

40 CFR 63 Subpart B - Requirements for MACT Determinations for Major Sources NOT APPLICABLE

MWC Units 1 through 4 Applicable Regulations:

40 CFR 60 Subpart A New Source Performance Standards (NSPS) General Provisions

BEST AVAILABLE COPY

B. FACILITY REGULATIONS

List of Applicable Regulations

40 CFR 60 Subpart Cb Emissions Guidelines for Existing Municipal Waste Combustors (MWCs)

40 CFR 60 Subpart Db Standards of Performance for Industrial-Commercial-Institutional Steam Generati

40 CFR 60 Subpart E Standards of Performance for Incinerators

40 CFR 61 Subpart C Beryllium National Emission Standard for Hazardous Air Pollutants (NESHAP)

40 CFR 64 - Compliance Assurance Monitoring

FAC 62-210.700 Excess Emissions

FAC 62-296.320(4)(b) General Visible Emission Standards

FAC 62-296.401(3) Specific Emission Limiting and Performance Standards Requirements for Incinerators

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification
CO	A
NOX	A
PM	B
SO2	A
HCL	A
PB	B
H027	B
DIOX	B
H114	B
H107	A
H021	B

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 1

1. Pollutant Emitted : CO
2. Requested Emissions Cap : (lbs/hour) (tons/year)
3. Basis for Emissions Cap Code :
4. Facility Pollutant Comment : Not applicable. Comment on previous page of forms: The Facility could emit ammonia from the SNCR system for NOx control. The applicant is requesting a permit limit of 50 ppmdv @ 7% O2 for ammonia slip in the stack gases. This is equivalent to a maximum potential emission rate of 15.73 lb/hr (Facility total for three units) and 60 tons per year (Facility total for three units). This pollutant is not emissions limited by any rule. ELSA does not have a code for ammonia, so it is not represented on these forms. However, it is represented in Volume 2 of this application.

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 2

1. Pollutant Emitted : NOX
2. Requested Emissions Cap : (lbs/hour) (tons/year)
3. Basis for Emissions Cap Code :
4. Facility Pollutant Comment : Not applicable.

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 3

1. Pollutant Emitted : PM
2. Requested Emissions Cap : (lbs/hour) (tons/year)
3. Basis for Emissions Cap Code :
4. Facility Pollutant Comment : Not applicable.

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 4

1. Pollutant Emitted : SO2
2. Requested Emissions Cap : (lbs/hour) (tons/year)
3. Basis for Emissions Cap Code :
4. Facility Pollutant Comment : Not applicable.

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 5

1. Pollutant Emitted :	HCL
2. Requested Emissions Cap :	(lbs/hour) (tons/year)
3. Basis for Emissions Cap Code :	
4. Facility Pollutant Comment :	Not applicable.

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 6

1. Pollutant Emitted :	PB
2. Requested Emissions Cap :	(lbs/hour) (tons/year)
3. Basis for Emissions Cap Code :	
4. Facility Pollutant Comment :	Not applicable.

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 7

1. Pollutant Emitted :	H027
2. Requested Emissions Cap :	(lbs/hour) (tons/year)
3. Basis for Emissions Cap Code :	
4. Facility Pollutant Comment :	Not applicable.

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 8

1. Pollutant Emitted : DIOX
2. Requested Emissions Cap : (lbs/hour) (tons/year)
3. Basis for Emissions Cap Code :
4. Facility Pollutant Comment : Not applicable.

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 9

1. Pollutant Emitted :	H114
2. Requested Emissions Cap :	(lbs/hour) (tons/year)
3. Basis for Emissions Cap Code :	
4. Facility Pollutant Comment :	Not applicable.

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 10

1. Pollutant Emitted :	H107
2. Requested Emissions Cap :	(lbs/hour) (tons/year)
3. Basis for Emissions Cap Code :	
4. Facility Pollutant Comment : Not applicable.	

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 11

1. Pollutant Emitted : H021
2. Requested Emissions Cap : (lbs/hour) (tons/year)
3. Basis for Emissions Cap Code :
4. Facility Pollutant Comment : Not applicable.

D. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location :	App. A, Fig. 1
2. Facility Plot Plan :	App. A., Fig. 2
3. Process Flow Diagram(s) :	App. A., Fig. 3
4. Precautions to Prevent Emissions of Unconfined Particulate Matter :	App. A, Att. 1
5. Fugitive Emissions Identification :	App. A., Att. 2
6. Supplemental Information for Construction Permit Application :	See Vol. 2

Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities :	NA
8. List of Equipment/Activities Regulated under Title VI :	NA
9. Alternative Methods of Operation :	NA
10. Alternative Modes of Operation (Emissions Trading) :	NA
11. Identification of Additional Applicable Requirements :	NA
12. Compliance Assurance Monitoring Plan :	NA
13. Risk Management Plan Verification :	NA
14. Compliance Report and Plan :	NA
15. Compliance Certification (Hard-copy Required) :	NA

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1

Municipal Waste Combustor - Unit #1

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? 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, a 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.

[ ] 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.

Emissions Unit Information Section 1

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Municipal Waste Combustor - Unit #1		
2. Emissions Unit Identification Number : 001 [ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : Stack flow parameters are based on BURN model runs.		

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Emissions Unit Control Equipment 1

1. Description : Spray Dryer Absorber
2. Control Device or Method Code : 41

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Emissions Unit Control Equipment 2

1. Description : Fabric Filter
2. Control Device or Method Code : 16

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Emissions Unit Control Equipment 3

1. Description : Activated Carbon Injection
2. Control Device or Method Code : 48

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Emissions Unit Control Equipment 4

1. Description : Selective Non-Catalytic Reduction System
2. Control Device or Method Code : 107

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Emissions Unit Details

1. Initial Startup Date :	18-Dec-1986		
2. Long-term Reserve Shutdown Date :			
3. Package Unit : Manufacturer :		Model Number :	
4. Generator Nameplate Rating :	29	MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 1,800 1.00	 Degrees Fahrenheit Seconds Degrees Fahrenheit	

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	172	mmBtu/hr		
2. Maximum Incinerator Rate :	38333.30	lb/hr	460.00	tons/day
3. Maximum Process or Throughput Rate :	104000	lb steam/hr		
4. Maximum Production Rate :				
5. Operating Capacity Comment : Generator nameplate rating is for the entire facility. Demonstration of compliance with maximum throughput capacity shall be measured by steam or feedwater flow. Maximum incinerator rate is 115% of nominal design capacity.				

Emissions Unit Operating Schedule

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

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Rule Applicability Analysis

Refer to Volume 2, Section 2, for Rule Applicability Analysis.

List of Applicable Regulations

Refer to Volume 2, Permit Application Text, Section 2, for List of Applicable Regulations.

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 1

Municipal Waste Combustor - Unit #1

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Emission Point #1	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) NA		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : NA		
5. Discharge Type Code :	V	
6. Stack Height :	220	feet
7. Exit Diameter :	5.1	feet
8. Exit Temperature :	290	°F
9. Actual Volumetric Flow Rate :	88869	acfm
10. Percent Water Vapor :	15.41	%
11. Maximum Dry Standard Flow Rate :	53189	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 368.200 North (km) : 3092.700		
14. Emission Point Comment : The stack flow parameters listed are based on BURN model output for worst-case emissions (115% of nominal thermal load w/ 6000 Btu/lb waste.		

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

Municipal Waste Combustor - Unit #1

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Mass burn	
2. Source Classification Code (SCC) : 5-01-001-05	
3. SCC Units : Tons Burned (all solid fuels)	
4. Maximum Hourly Rate : 19.17	5. Maximum Annual Rate : 167,899.40
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 9	
10. Segment Comment : Maximum hourly rate is based upon boiler loading capacity of 38,333 lb/hr.	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - CO	099		EL
2 - NOX	107		EL
3 - PM	016		EL
4 - SO2	041	016	EL
5 - HCL	041	016	EL
6 - PB	016		EL
7 - H027	016		EL
8 - DIOX	041	016	EL
9 - H114	048	016	EL
10 - H107	041	016	EL
11 - H021	016		EL

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **CO**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 17.24 lb/hour 75.50 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B
9. Pollutant Potential/Estimated Emissions Comment : Emission estimate based on 4-hr arithmetic block avg. CO concentration in flue gas will be equal to or less than 100 ppmv (7% O2), as determined by CEMs, consistent with EPA's Emission Guidlines.

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		RULE		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		100.00		ppmdv @ 7% O2
4. Equivalent Allowable Emissions :				
	17.24	lb/hour	75.50	tons/year
5. Method of Compliance :				
CEM, as specified in 40 CFR 60 Appendix B				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :				
Emission limit based on 100 ppmdv corrected to 7% O2 (4-hour avg.)				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : **NOX**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 58.10 lb/hour 254.20 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : The 24-hr block arithmetic mean NOx concentration in flue gases will be at or below 205 ppmv (corrected to 7% O2), as determined by CEMs, consistent with EPA's Emission Guidlines.

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		RULE		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		205.00		ppmdv @ 7% O2
4. Equivalent Allowable Emissions :				
	58.10	lb/hour	254.20	tons/year
5. Method of Compliance :				
CEM, as specified in 40 CFR 60 Appendix B				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :				
Emission limit is based on a 24-hour average. 40 CFR 60 Subpart Cb				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted :	**PM**
2. Total Percent Efficiency of Control :	%
3. Potential Emissions :	4.06 lb/hour 17.80 tons/year
4. Synthetically Limited?	[ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions:	to tons/year
6. Emissions Factor : Reference :	40 CFR 60 Subpart Cb
7. Emissions Method Code :	0
8. Calculations of Emissions :	See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment :	For conservatism, all PM was assumed to be PM10. Emission based on 0.012 gr/dscf (corrected to 7% O2), consistent with EPA Emission Guidelines.

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Information Section 3

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01		gr/dscf @ 7% O2	
4. Equivalent Allowable Emissions :	4.06	lb/hour	17.80	tons/year
5. Method of Compliance : Stack test; Method 5				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : 0.012 gr/dscf @ 7% O2 (ELSA does not show all digits in Item #3.) EPA's Emissions Guideline limit for large municipal waste combustors. 60 CFR 60 Subpart Cb				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted : **SO2**
2. Total Percent Efficiency of Control : 75.00 %
3. Potential Emissions : 32.53 lb/hour 142.47 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : SO2 emission limit is based on maximum estimated inlet concentration of 330 ppmdv (corrected to 7% O2) and applying a 75 % control efficiency, consistent with EPA's Emission Guidelines.

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Information Section 4

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	75.00	percent removal		
4. Equivalent Allowable Emissions :	32.53	lb/hour	142.47	tons/year
5. Method of Compliance : CEM, as specified in 40 CFR 60 Appendix B				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : 40 CFR 60 Subpart Cb specifies the less stringent of 75% removal or 29 ppmdv @ 7% O2 . Maximum inlet concentration is assumed to be 330 ppmdv @ 7% O2; allowable emissions based on 75% removal of this inlet concentration.				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted : **HCL**	
2. Total Percent Efficiency of Control :	95.00 %
3. Potential Emissions :	16.83 lb/hour 73.70 tons/year
4. Synthetically Limited? [ ] Yes [X] No	
5. Range of Estimated Fugitive/Other Emissions:	to tons/year
6. Emissions Factor : Reference :	40 CFR 60 Subpart Cb
7. Emissions Method Code :	0
8. Calculations of Emissions : See Volume 2, Appendix B.	
9. Pollutant Potential/Estimated Emissions Comment : HCl emission limit is based on 1500 ppmdv (corrected to 7% O2) inlet and applying a 95 % control efficiency, consistent with EPA's Emission Guidelines.	

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Information Section 5

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		RULE		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		95.00		percent removal
4. Equivalent Allowable Emissions :	16.83	lb/hour	73.70	tons/year
5. Method of Compliance : Stack test; Method 26 or 26A				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : 40 CFR 60 Subpart Cb specifies the less stringent of 95% removal or 29 ppmdv @ 7% O2 . Maximum inlet concentration is assumed to be 1500 ppmdv @ 7% O2; allowable emissions based on 95% removal of this inlet concentration.				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Potential/Estimated Emissions : Pollutant 6

1. Pollutant Emitted : **PB**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 0.07 lb/hour 0.28 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : 0.44 mg/dscm @ 7% O2 40 CFR 60 Subpart Cb Emission Guidelines limit

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Information Section 6

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		RULE		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		440.00		ug/dscm @ 7% O2
4. Equivalent Allowable Emissions :	0.07	lb/hour	0.28	tons/year
5. Method of Compliance : Stack test; Method 29				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : 40 CFR 60 Subpart Cb				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Potential/Estimated Emissions : Pollutant 7

1. Pollutant Emitted : **H027**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : lb/hour 0.03 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B
9. Pollutant Potential/Estimated Emissions Comment : lb/hr: 0.00592 (ELSA will not print this in Item #3.) 0.04 mg/dscm @ 7% O2; limit is from Emission Guidelines, 40 CFR Subpart Cb

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Information Section 7

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.04		mg/dscm @ 7% O2	
4. Equivalent Allowable Emissions :	0.01	lb/hour	0.03	tons/year
5. Method of Compliance : Stack test; Method 29				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : 40 CFR 60 Subpart Cb				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Potential/Estimated Emissions : Pollutant 8

1. Pollutant Emitted : **DIOX**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : lb/hour tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : Potential Emissions: 4.44 x 10-6 lb/hr 1.94 x 10-5 tons per year (ELSA will not print in Item #3) 30 ng/dscm @ 7% O2; limit from 40 CFR 60 Subpart Cb

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Information Section 8

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE	
2. Future Effective Date of Allowable Emissions :		
3. Requested Allowable Emissions and Units :	30.00	ng/dscm @ 7% O2
4. Equivalent Allowable Emissions :	lb/hour	tons/year
5. Method of Compliance : Stack test; Method 23		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Equivalent Allowable Emissions: 4.44 x 10-6 lb/hr 1.94 x 10-5 tons per year (ELSA will not print in Item #4.) 40 CFR 60 Subpart Cb		

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Potential/Estimated Emissions : Pollutant 9

1. Pollutant Emitted : **H114**
2. Total Percent Efficiency of Control : 85.00 %
3. Potential Emissions : 0.02 lb/hour 0.09 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : 85% removal of assumed maximum inlet concentration of 900 ug/dscm @ 7% O2. 40 CFR 60 Subpart Cb

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Information Section 9

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		RULE		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		85.00		percent removal
4. Equivalent Allowable Emissions :	0.02	lb/hour	0.09	tons/year
5. Method of Compliance : Stack test; Method 29				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : 40 CFR 60 Subpart Cb specifies the less stringent of 85% removal or 80 ug/dscm @ 7% O2 (but reduced to 70 ug/dscm @ 7% O2 by Florida Mercury Rules). Maximum inlet concentration is assumed to be 900 ug/dscm @ 7% O2; allowable emissions based on 85% removal of this inlet concentration.				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Potential/Estimated Emissions : Pollutant 10

1. Pollutant Emitted : **H107**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 1.00 lb/hour 4.40 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : Existing PSD Permit
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : 6.74 mg/dscm @ 7% O2 Based on current permit limit (PSD-FL-121(A)).

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Information Section 10

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		OTHER		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		6.74		mg/dscm @ 7% O2
4. Equivalent Allowable Emissions :	1.00	lb/hour	4.40	tons/year
5. Method of Compliance : Compliance previously demonstrated.				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Based on existing permit limit (PSD-FL-121(A)), and adjusted to appropriate units (i.e. from gr/dscf @12% CO2 to mg/dscm @7%O2). See Volume 2, Sections 2, 4 and Appendix B. Compliance for this pollutant previously demonstrated by initial Facility compliance test.				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Potential/Estimated Emissions : Pollutant 11

1. Pollutant Emitted : **H021**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : lb/hour tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : Existing PSD permit
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : Potential Emissions: 2.18 x 10-4 lb/hr 9.56 x 10-4 tons per year (ELSA will not print in Item #3.) Based on current permit limit (PSD-FL-121(A)).

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Pollutant Information Section 11

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER	
2. Future Effective Date of Allowable Emissions :		
3. Requested Allowable Emissions and Units :	1.48	ug/dscm @ 7% O2
4. Equivalent Allowable Emissions :	lb/hour	tons/year
5. Method of Compliance : Compliance previously demonstrated.		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Equivalent Allowable Emissions: 2.18 x 10-4 lb/hr 9.56 x 10-4 tons per year (ELSA will not print in Item #4.) Based on existing permit limit (PSD-FL-121(A)), and adjusted to appropriate units (i.e. from gr/dscf @12% CO2 to ug/dscm @7%O2). See Volume 2, Sections 2, 4 and Appendix B. Compliance for this pollutant previously demonstrated by initial Facility compliance test.		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	10
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
Normal Conditions :	10 %
Exceptional Conditions :	%
Maximum Period of Excess Opacity Allowed :	min/hour
4. Method of Compliance :	
COM and Annual stack test	
5. Visible Emissions Comment :	
40 CFR 60 Subpart Cb opacity limit	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code : VE	2. Pollutant :
3. CMS Requirement : RULE	
4. Monitor Information : Manufacturer : Lear Siegler Model Number : RM 41 Serial Number : 15603802	
5. Installation Date : 01-Oct-1986	
6. Performance Specification Test Date : 10-Mar-1987	
7. Continuous Monitor Comment :	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Continuous Monitoring System : Continuous Monitor 2

1. Parameter Code : O2	2. Pollutant :
3. CMS Requirement : OTHER	
4. Monitor Information : Manufacturer : Ametek Corp. Model Number : Thermox WDG Serial Number : CO36232-3	
5. Installation Date : 18-Dec-1986	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment :	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Continuous Monitoring System : Continuous Monitor 3

1. Parameter Code : EM	2. Pollutant : CO
3. CMS Requirement : RULE	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Information to be provided.	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Continuous Monitoring System : Continuous Monitor 4

1. Parameter Code : EM	2. Pollutant : NOX
3. CMS Requirement : RULE	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Information to be provided.	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
Municipal Waste Combustor - Unit #1

Continuous Monitoring System : Continuous Monitor 5

1. Parameter Code : EM	2. Pollutant : SO2
3. CMS Requirement : RULE	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Information to be provided.	

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

Emissions Unit Information Section 1

Municipal Waste Combustor - Unit #1

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] 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.

2. Increment Consuming for Nitrogen Dioxide?

[ ] 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.

[X] None of the above apply. If so, 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 : C	SO2 : C	NO2 : E
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 1

Municipal Waste Combustor - Unit #1

Supplemental Requirements for All Applications

1. Process Flow Diagram :	App. A, Fig. 3
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	To be provided
4. Description of Stack Sampling Facilities :	To be provided
5. Compliance Test Report :	Vol. 2, App. E
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	Volume 2
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading) :	NA

12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA

14. Acid Rain Application (Hard-copy Required) :

NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 2

Municipal Waste Combustor - Unit #2

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? 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, a 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.

[ ] 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.

Emissions Unit Information Section 2

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Municipal Waste Combustor - Unit #2		
2. Emissions Unit Identification Number : 002 [ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : Stack flow parameters are based on BURN model runs.		

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Emissions Unit Control Equipment 1

1. Description : Spray Dryer Absorber
2. Control Device or Method Code : 41

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Emissions Unit Control Equipment 2

1. Description : Fabric Filter
2. Control Device or Method Code : 16

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Emissions Unit Control Equipment 3

1. Description : Activated Carbon Injection
2. Control Device or Method Code : 48

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Emissions Unit Control Equipment 4

1. Description : Selective Non-Catalytic Reduction System
2. Control Device or Method Code : 107

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Emissions Unit Details

1. Initial Startup Date :	18-Dec-1986			
2. Long-term Reserve Shutdown Date :				
3. Package Unit : Manufacturer :			Model Number :	
4. Generator Nameplate Rating :	29	MW		
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 1,800 1.00 		 Degrees Fahrenheit Seconds Degrees Fahrenheit	

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	172	mmBtu/hr		
2. Maximum Incinerator Rate :	38333.30	lb/hr	460.00	tons/day
3. Maximum Process or Throughput Rate :	104000	lb steam/hr		
4. Maximum Production Rate :				
5. Operating Capacity Comment : Generator nameplate rating is for the entire facility. Demonstration of compliance with maximum throughput capacity shall be measured by steam or feedwater flow. Maximum incinerator rate is 115% of nominal design capacity.				

Emissions Unit Operating Schedule

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

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Rule Applicability Analysis

Refer to Volume 2, Section 2, for Rule Applicability Analysis.

List of Applicable Regulations

Refer to Volume 2, Permit Application Text, Section 2, for List of Applicable Regulations.

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 2

Municipal Waste Combustor - Unit #2

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Emission Point #1	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) NA		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : NA		
5. Discharge Type Code :	V	
6. Stack Height :	220	feet
7. Exit Diameter :	5.1	feet
8. Exit Temperature :	290	°F
9. Actual Volumetric Flow Rate :	88869	acfm
10. Percent Water Vapor :	15.41	%
11. Maximum Dry Standard Flow Rate :	53189	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 368.200 North (km) : 3092.700		
14. Emission Point Comment : The stack flow parameters listed are based on BURN model output for worst-case emissions (115% of nominal thermal load w/ 6000 Btu/lb waste.		

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 2

Municipal Waste Combustor - Unit #2

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Mass burn	
2. Source Classification Code (SCC) : 5-01-001-05	
3. SCC Units : Tons Burned (all solid fuels)	
4. Maximum Hourly Rate : 19.17	5. Maximum Annual Rate : 167,899.40
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 9	
10. Segment Comment : Maximum hourly rate is based upon boiler loading capacity of 38,333 lb/hr.	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - CO	099		EL
2 - NOX	107		EL
3 - PM	016		EL
4 - SO2	041	016	EL
5 - HCL	041	016	EL
6 - PB	016		EL
7 - H027	016		EL
8 - DIOX	041	016	EL
9 - H114	048	016	EL
10 - H107	041	016	EL
11 - H021	016		EL

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **CO**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 17.24 lb/hour 75.50 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B
9. Pollutant Potential/Estimated Emissions Comment : Emission estimate based on 4-hr arithmetic block avg. CO concentration in flue gas will be equal to or less than 100 ppmv (7% O2), as determined by CEMs, consistent with EPA's Emission Guidlines.

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		RULE		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		100.00		ppmdv @ 7% O2
4. Equivalent Allowable Emissions :				
	17.24	lb/hour	75.50	tons/year
5. Method of Compliance :				
CEM, as specified in 40 CFR 60 Appendix B				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :				
Emission limit based on 100 ppmdv corrected to 7% O2 (4-hour avg.)				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : **NOX**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 58.10 lb/hour 254.20 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : The 24-hr block arithmetic mean NOx concentration in flue gases will be at or below 205 ppmv (corrected to 7% O2), as determined by CEMs, consistent with EPA's Emission Guidlines.

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	205.00	ppmdv @ 7% O2		
4. Equivalent Allowable Emissions :	58.10	lb/hour	254.20	tons/year
5. Method of Compliance : CEM, as specified in 40 CFR 60 Appendix B				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Emission limit is based on a 24-hour average. 40 CFR 60 Subpart Cb				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted :	**PM**
2. Total Percent Efficiency of Control :	%
3. Potential Emissions :	4.06 lb/hour 17.80 tons/year
4. Synthetically Limited?	[ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions:	to tons/year
6. Emissions Factor : Reference :	40 CFR 60 Subpart Cb
7. Emissions Method Code :	0
8. Calculations of Emissions :	See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment :	For conservatism, all PM was assumed to be PM10. Emission based on 0.012 gr/dscf (corrected to 7% O2), consistent with EPA Emission Guidelines.

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Information Section 3

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		RULE		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		0.01		gr/dscf @ 7% O2
4. Equivalent Allowable Emissions :				
	4.06	lb/hour	17.80	tons/year
5. Method of Compliance :				
Stack test; Method 5				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :				
0.012 gr/dscf @ 7% O2 (ELSA does not show all digits in Item #3.) EPA's Emissions Guideline limit for large municipal waste combustors. 60 CFR 60 Subpart Cb				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted : **SO2**
2. Total Percent Efficiency of Control : 75.00 %
3. Potential Emissions : 32.53 lb/hour 142.47 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : SO2 emission limit is based on maximum estimated inlet concentration of 330 ppmdv (corrected to 7% O2) and applying a 75 % control efficiency, consistent with EPA's Emission Guidelines.

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Information Section 4

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	75.00	percent removal		
4. Equivalent Allowable Emissions :	32.53	lb/hour	142.47	tons/year
5. Method of Compliance : CEM, as specified in 40 CFR 60 Appendix B				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : 40 CFR 60 Subpart Cb specifies the less stringent of 75% removal or 29 ppmdv @ 7% O2 . Maximum inlet concentration is assumed to be 330 ppmdv @ 7% O2; allowable emissions based on 75% removal of this inlet concentration.				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted : **HCL**
2. Total Percent Efficiency of Control : 95.00 %
3. Potential Emissions : 16.83 lb/hour 73.70 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : HCl emission limit is based on 1500 ppmdv (corrected to 7% O2) inlet and applying a 95 % control efficiency, consistent with EPA's Emission Guidelines.

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Information Section 5

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	95.00	percent removal		
4. Equivalent Allowable Emissions :	16.83	lb/hour	73.70	tons/year
5. Method of Compliance : Stack test; Method 26 or 26A				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : 40 CFR 60 Subpart Cb specifies the less stringent of 95% removal or 29 ppmdv @ 7% O2 . Maximum inlet concentration is assumed to be 1500 ppmdv @ 7% O2; allowable emissions based on 95% removal of this inlet concentration.				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Potential/Estimated Emissions : Pollutant 6

1. Pollutant Emitted : **PB**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 0.07 lb/hour 0.28 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : 0.44 mg/dscm @ 7% O2 40 CFR 60 Subpart Cb Emission Guidelines limit

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Information Section 6

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		RULE		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		440.00		ug/dscm @ 7% O2
4. Equivalent Allowable Emissions :				
	0.07	lb/hour	0.28	tons/year
5. Method of Compliance :				
Stack test; Method 29				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :				
40 CFR 60 Subpart Cb				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Potential/Estimated Emissions : Pollutant 7

1. Pollutant Emitted : **H027**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : lb/hour 0.03 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B
9. Pollutant Potential/Estimated Emissions Comment : lb/hr: 0.00592 (ELSA will not print this in Item #3.) 0.04 mg/dscm @ 7% O2; limit is from Emission Guidelines, 40 CFR Subpart Cb

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Information Section 7

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.04		mg/dscm @ 7% O2	
4. Equivalent Allowable Emissions :	0.01	lb/hour	0.03	tons/year
5. Method of Compliance : Stack test; Method 29				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : 40 CFR 60 Subpart Cb				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Potential/Estimated Emissions : Pollutant 8

1. Pollutant Emitted : **DIOX**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : lb/hour tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : Potential Emissions: 4.44 x 10-6 lb/hr 1.94 x 10-5 tons per year (ELSA will not print in Item #3) 30 ng/dscm @ 7% O2; limit from 40 CFR 60 Subpart Cb

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Information Section 8

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE	
2. Future Effective Date of Allowable Emissions :		
3. Requested Allowable Emissions and Units :	30.00	ng/dscm @ 7% O2
4. Equivalent Allowable Emissions :	lb/hour	tons/year
5. Method of Compliance : Stack test; Method 23		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Equivalent Allowable Emissions: 4.44 x 10-6 lb/hr 1.94 x 10-5 tons per year (ELSA will not print in Item #4.) 40 CFR 60 Subpart Cb		

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Potential/Estimated Emissions : Pollutant 9

1. Pollutant Emitted : **H114**
2. Total Percent Efficiency of Control : 85.00 %
3. Potential Emissions : 0.02 lb/hour 0.09 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : 85% removal of assumed maximum inlet concentration of 900 ug/dscm @ 7% O2. 40 CFR 60 Subpart Cb

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Information Section 9

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		RULE		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		85.00		percent removal
4. Equivalent Allowable Emissions :				
	0.02	lb/hour	0.09	tons/year
5. Method of Compliance :				
Stack test; Method 29				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :				
40 CFR 60 Subpart Cb specifies the less stringent of 85% removal or 80 ug/dscm @ 7% O2 (but reduced to 70 ug/dscm @ 7% O2 by Florida Mercury Rules). Maximum inlet concentration is assumed to be 900 ug/dscm @ 7% O2; allowable emissions based on 85% removal of this inlet concentration.				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Potential/Estimated Emissions : Pollutant 10

1. Pollutant Emitted : **H107**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 1.00 lb/hour 4.40 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : Existing PSD Permit
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : 6.74 mg/dscm @ 7% O2 Based on current permit limit (PSD-FL-121(A)).

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Information Section 10

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		OTHER		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		6.74		mg/dscm @ 7% O2
4. Equivalent Allowable Emissions :	1.00	lb/hour	4.40	tons/year
5. Method of Compliance : Compliance previously demonstrated.				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Based on existing permit limit (PSD-FL-121(A)), and adjusted to appropriate units (i.e. from gr/dscf @12% CO2 to mg/dscm @7%O2). See Volume 2, Sections 2, 4 and Appendix B. Compliance for this pollutant previously demonstrated by initial Facility compliance test.				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Potential/Estimated Emissions : Pollutant 11

1. Pollutant Emitted : **H021**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : lb/hour tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : Existing PSD permit
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : Potential Emissions: 2.18 x 10-4 lb/hr 9.56 x 10-4 tons per year (ELSA will not print in Item #3.) Based on current permit limit (PSD-FL-121(A)).

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Pollutant Information Section 11

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER	
2. Future Effective Date of Allowable Emissions :		
3. Requested Allowable Emissions and Units :	1.48	ug/dscm @ 7% O2
4. Equivalent Allowable Emissions :	lb/hour	tons/year
5. Method of Compliance : Compliance previously demonstrated.		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Equivalent Allowable Emissions: 2.18 x 10-4 lb/hr 9.56 x 10-4 tons per year (ELSA will not print in Item #4.) Based on existing permit limit (PSD-FL-121(A)), and adjusted to appropriate units (i.e. from gr/dscf @12% CO2 to ug/dscm @7%O2). See Volume 2, Sections 2, 4 and Appendix B. Compliance for this pollutant previously demonstrated by initial Facility compliance test.		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype : 10
2. Basis for Allowable Opacity : RULE
3. Requested Allowable Opacity : Normal Conditions : 10 % Exceptional Conditions : % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance : COM and Annual stack test
5. Visible Emissions Comment : 40 CFR 60 Subpart Cb opacity limit

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code : VE	2. Pollutant :
3. CMS Requirement : RULE	
4. Monitor Information : Manufacturer : Lear Siegler Model Number : RM 41 Serial Number : 15603802	
5. Installation Date : 01-Oct-1986	
6. Performance Specification Test Date : 10-Mar-1987	
7. Continuous Monitor Comment :	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Continuous Monitoring System : Continuous Monitor 2

1. Parameter Code : O2	2. Pollutant :
3. CMS Requirement : OTHER	
4. Monitor Information : Manufacturer : Ametek Corp. Model Number : Thermox WDG Serial Number : CO36232-3	
5. Installation Date : 18-Dec-1986	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment :	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Continuous Monitoring System : Continuous Monitor 3

1. Parameter Code : EM	2. Pollutant : CO
3. CMS Requirement : RULE	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Information to be provided.	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Continuous Monitoring System : Continuous Monitor 4

1. Parameter Code : EM	2. Pollutant : NOX
3. CMS Requirement : RULE	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Information to be provided.	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
Municipal Waste Combustor - Unit #2

Continuous Monitoring System : Continuous Monitor 5

1. Parameter Code : EM	2. Pollutant : SO2
3. CMS Requirement : RULE	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Information to be provided.	

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

Emissions Unit Information Section 2

Municipal Waste Combustor - Unit #2

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] 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.

2. Increment Consuming for Nitrogen Dioxide?

[ ] 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.

[X] None of the above apply. If so, 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 : C	SO2 : C	NO2 : E
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 2

Municipal Waste Combustor - Unit #2

Supplemental Requirements for All Applications

1. Process Flow Diagram :	App. A, Fig. 3
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	To be provided
4. Description of Stack Sampling Facilities :	To be provided
5. Compliance Test Report :	Vol. 2, App. E
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	Volume 2
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading) :	NA

12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA

14. Acid Rain Application (Hard-copy Required) :

NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 3

Municipal Waste Combustor - Unit #3

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? 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, a 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.

[ ] 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.

Emissions Unit Information Section 3

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Municipal Waste Combustor - Unit #3		
2. Emissions Unit Identification Number : 003 [ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : Stack flow parameters are based on BURN model runs.		

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Emissions Unit Control Equipment 1

1. Description : Spray Dryer Absorber
2. Control Device or Method Code : 41

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Emissions Unit Control Equipment 2

1. Description : Fabric Filter
2. Control Device or Method Code : 16

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Emissions Unit Control Equipment 3

1. Description : Activated Carbon Injection
2. Control Device or Method Code : 48

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Emissions Unit Control Equipment 4

1. Description : Selective Non-Catalytic Reduction System
2. Control Device or Method Code : 107

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Emissions Unit Details

1. Initial Startup Date :	18-Dec-1986
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer :	Model Number :
4. Generator Nameplate Rating :	29 MW
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	1,800 Degrees Fahrenheit 1.00 Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	172	mmBtu/hr		
2. Maximum Incinerator Rate :	38333.30	lb/hr	460.00	tons/day
3. Maximum Process or Throughput Rate :	104000	lb steam/hr		
4. Maximum Production Rate :				
5. Operating Capacity Comment : Generator nameplate rating is for the entire facility. Demonstration of compliance with maximum throughput capacity shall be measured by steam or feedwater flow. Maximum incinerator rate is 115% of nominal design capacity.				

Emissions Unit Operating Schedule

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

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Rule Applicability Analysis

Refer to Volume 2, Section 2, for Rule Applicability Analysis.

List of Applicable Regulations

Refer to Volume 2, Permit Application Text, Section 2, for List of Applicable Regulations.

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 3

Municipal Waste Combustor - Unit #3

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Emission Point #1	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) NA		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : NA		
5. Discharge Type Code :	V	
6. Stack Height :	220	feet
7. Exit Diameter :	5.1	feet
8. Exit Temperature :	290	°F
9. Actual Volumetric Flow Rate :	88869	acfm
10. Percent Water Vapor :	15.41	%
11. Maximum Dry Standard Flow Rate :	53189	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 368.200 North (km) : 3092.700		
14. Emission Point Comment : The stack flow parameters listed are based on BURN model output for worst-case emissions (115% of nominal thermal load w/ 6000 Btu/lb waste.		

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 3

Municipal Waste Combustor - Unit #3

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Mass burn	
2. Source Classification Code (SCC) : 5-01-001-05	
3. SCC Units : Tons Burned (all solid fuels)	
4. Maximum Hourly Rate : 19.17	5. Maximum Annual Rate : 167,899.40
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 9	
10. Segment Comment : Maximum hourly rate is based upon boiler loading capacity of 38,333 lb/hr.	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - CO	099		EL
2 - NOX	107		EL
3 - PM	016		EL
4 - SO2	041	016	EL
5 - HCL	041	016	EL
6 - PB	016		EL
7 - H027	016		EL
8 - DIOX	041	016	EL
9 - H114	048	016	EL
10 - H107	041	016	EL
11 - H021	016		EL

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **CO**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 17.24 lb/hour 75.50 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B
9. Pollutant Potential/Estimated Emissions Comment : Emission estimate based on 4-hr arithmetic block avg. CO concentration in flue gas will be equal to or less than 100 ppmv (7% O2), as determined by CEMs, consistent with EPA's Emission Guidlines.

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	100.00	ppmdv @ 7% O2		
4. Equivalent Allowable Emissions :	17.24	lb/hour	75.50	tons/year
5. Method of Compliance : CEM, as specified in 40 CFR 60 Appendix B				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Emission limit based on 100 ppmdv corrected to 7% O2 (4-hour avg.)				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted :	**NOX**
2. Total Percent Efficiency of Control :	%
3. Potential Emissions :	58.10 lb/hour 254.20 tons/year
4. Synthetically Limited?	[ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions:	to tons/year
6. Emissions Factor : Reference :	40 CFR 60 Subpart Cb
7. Emissions Method Code :	0
8. Calculations of Emissions :	See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment :	The 24-hr block arithmetic mean NOx concentration in flue gases will be at or below 205 ppmv (corrected to 7% O2), as determined by CEMs, consistent with EPA's Emission Guidlines.

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	205.00		ppmdv @ 7% O2	
4. Equivalent Allowable Emissions :	58.10	lb/hour	254.20	tons/year
5. Method of Compliance : CEM, as specified in 40 CFR 60 Appendix B				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Emission limit is based on a 24-hour average. 40 CFR 60 Subpart Cb				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted : **PM**	
2. Total Percent Efficiency of Control :	%
3. Potential Emissions :	4.06 lb/hour 17.80 tons/year
4. Synthetically Limited? [ ] Yes [X] No	
5. Range of Estimated Fugitive/Other Emissions:	to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb	
7. Emissions Method Code : 0	
8. Calculations of Emissions : See Volume 2, Appendix B.	
9. Pollutant Potential/Estimated Emissions Comment : For conservatism, all PM was assumed to be PM10. Emission based on 0.012 gr/dscf (corrected to 7% O2), consistent with EPA Emission Guidelines.	

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Information Section 3

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		RULE		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		0.01		gr/dscf @ 7% O2
4. Equivalent Allowable Emissions :	4.06	lb/hour	17.80	tons/year
5. Method of Compliance : Stack test; Method 5				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : 0.012 gr/dscf @ 7% O2 (ELSA does not show all digits in Item #3.) EPA's Emissions Guideline limit for large municipal waste combustors. 60 CFR 60 Subpart Cb				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted :	**SO2**
2. Total Percent Efficiency of Control :	75.00 %
3. Potential Emissions :	32.53 lb/hour 142.47 tons/year
4. Synthetically Limited?	[ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions:	to tons/year
6. Emissions Factor : Reference :	40 CFR 60 Subpart Cb
7. Emissions Method Code :	0
8. Calculations of Emissions :	See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment :	SO2 emission limit is based on maximum estimated inlet concentration of 330 ppmdv (corrected to 7% O2) and applying a 75 % control efficiency, consistent with EPA's Emission Guidelines.

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Information Section 4

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	75.00	percent removal		
4. Equivalent Allowable Emissions :	32.53	lb/hour	142.47	tons/year
5. Method of Compliance : CEM, as specified in 40 CFR 60 Appendix B				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : 40 CFR 60 Subpart Cb specifies the less stringent of 75% removal or 29 ppmdv @ 7% O2 . Maximum inlet concentration is assumed to be 330 ppmdv @ 7% O2; allowable emissions based on 75% removal of this inlet concentration.				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted : **HCL**	
2. Total Percent Efficiency of Control : 95.00 %	
3. Potential Emissions : 16.83 lb/hour 73.70 tons/year	
4. Synthetically Limited? [ ] Yes [X] No	
5. Range of Estimated Fugitive/Other Emissions: to tons/year	
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb	
7. Emissions Method Code : 0	
8. Calculations of Emissions : See Volume 2, Appendix B.	
9. Pollutant Potential/Estimated Emissions Comment : HCl emission limit is based on 1500 ppmdv (corrected to 7% O2) inlet and applying a 95 % control efficiency, consistent with EPA's Emission Guidelines.	

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Information Section 5

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		RULE		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		95.00		percent removal
4. Equivalent Allowable Emissions :				
	16.83	lb/hour	73.70	tons/year
5. Method of Compliance :				
Stack test; Method 26 or 26A				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :				
40 CFR 60 Subpart Cb specifies the less stringent of 95% removal or 29 ppmdv @ 7% O2 . Maximum inlet concentration is assumed to be 1500 ppmdv @ 7% O2; allowable emissions based on 95% removal of this inlet concentration.				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Potential/Estimated Emissions : Pollutant 6

1. Pollutant Emitted : **PB**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 0.07 lb/hour 0.28 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : 0.44 mg/dscm @ 7% O2 40 CFR 60 Subpart Cb Emission Guidelines limit

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Information Section 6

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		RULE		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		440.00		ug/dscm @ 7% O2
4. Equivalent Allowable Emissions :				
	0.07	lb/hour	0.28	tons/year
5. Method of Compliance :				
Stack test; Method 29				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :				
40 CFR 60 Subpart Cb				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Potential/Estimated Emissions : Pollutant 7

1. Pollutant Emitted : **H027**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : lb/hour 0.03 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B
9. Pollutant Potential/Estimated Emissions Comment : lb/hr: 0.00592 (ELSA will not print this in Item #3.) 0.04 mg/dscm @ 7% O2; limit is from Emission Guidelines, 40 CFR Subpart Cb

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Information Section 7

Allowable Emissions 1

1. Basis for Allowable Emissions Code :		RULE		
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :		0.04		mg/dscm @ 7% O2
4. Equivalent Allowable Emissions :				
	0.01	lb/hour	0.03	tons/year
5. Method of Compliance :				
Stack test; Method 29				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :				
40 CFR 60 Subpart Cb				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Potential/Estimated Emissions : Pollutant 8

1. Pollutant Emitted : **DIOX**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : lb/hour tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : Potential Emissions: 4.44 x 10-6 lb/hr 1.94 x 10-5 tons per year (ELSA will not print in Item #3) 30 ng/dscm @ 7% O2; limit from 40 CFR 60 Subpart Cb

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Information Section 8

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE	
2. Future Effective Date of Allowable Emissions :		
3. Requested Allowable Emissions and Units :	30.00	ng/dscm @ 7% O2
4. Equivalent Allowable Emissions :	lb/hour	tons/year
5. Method of Compliance : Stack test; Method 23		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Equivalent Allowable Emissions: 4.44 x 10-6 lb/hr 1.94 x 10-5 tons per year (ELSA will not print in Item #4.) 40 CFR 60 Subpart Cb		

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Potential/Estimated Emissions : Pollutant 9

1. Pollutant Emitted : **H114**
2. Total Percent Efficiency of Control : 85.00 %
3. Potential Emissions : 0.02 lb/hour 0.09 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : 85% removal of assumed maximum inlet concentration of 900 ug/dscm @ 7% O2. 40 CFR 60 Subpart Cb

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Information Section 9

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	85.00	percent removal		
4. Equivalent Allowable Emissions :	0.02	lb/hour	0.09	tons/year
5. Method of Compliance : Stack test; Method 29				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : 40 CFR 60 Subpart Cb specifies the less stringent of 85% removal or 80 ug/dscm @ 7% O2 (but reduced to 70 ug/dscm @ 7% O2 by Florida Mercury Rules). Maximum inlet concentration is assumed to be 900 ug/dscm @ 7% O2; allowable emissions based on 85% removal of this inlet concentration.				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Potential/Estimated Emissions : Pollutant 10

1. Pollutant Emitted : **H107**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 1.00 lb/hour 4.40 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : Existing PSD Permit
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : 6.74 mg/dscm @ 7% O2 Based on current permit limit (PSD-FL-121(A)).

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Information Section 10

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	6.74		mg/dscm @ 7% O2	
4. Equivalent Allowable Emissions :	1.00	lb/hour	4.40	tons/year
5. Method of Compliance : Compliance previously demonstrated.				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Based on existing permit limit (PSD-FL-121(A)), and adjusted to appropriate units (i.e. from gr/dscf @12% CO2 to mg/dscm @7%O2). See Volume 2, Sections 2, 4 and Appendix B. Compliance for this pollutant previously demonstrated by initial Facility compliance test.				

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Potential/Estimated Emissions : Pollutant 11

1. Pollutant Emitted : **H021**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : lb/hour tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : Existing PSD permit
7. Emissions Method Code : 0
8. Calculations of Emissions : See Volume 2, Appendix B.
9. Pollutant Potential/Estimated Emissions Comment : Potential Emissions: 2.18 x 10-4 lb/hr 9.56 x 10-4 tons per year (ELSA will not print in Item #3.) Based on current permit limit (PSD-FL-121(A)).

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Pollutant Information Section 11

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER	
2. Future Effective Date of Allowable Emissions :		
3. Requested Allowable Emissions and Units :	1.48	ug/dscm @ 7% O2
4. Equivalent Allowable Emissions :	lb/hour	tons/year
5. Method of Compliance : Compliance previously demonstrated.		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Equivalent Allowable Emissions: 2.18 x 10-4 lb/hr 9.56 x 10-4 tons per year (ELSA will not print in Item #4.) Based on existing permit limit (PSD-FL-121(A)), and adjusted to appropriate units (i.e. from gr/dscf @12% CO2 to ug/dscm @7%O2). See Volume 2, Sections 2, 4 and Appendix B. Compliance for this pollutant previously demonstrated by initial Facility compliance test.		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	10
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
Normal Conditions :	10 %
Exceptional Conditions :	%
Maximum Period of Excess Opacity Allowed :	min/hour
4. Method of Compliance :	
COM and Annual stack test	
5. Visible Emissions Comment :	
40 CFR 60 Subpart Cb opacity limit	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code : VE	2. Pollutant :
3. CMS Requirement : RULE	
4. Monitor Information : Manufacturer : Lear Siegler Model Number : RM 41 Serial Number : 15603802	
5. Installation Date : 01-Oct-1986	
6. Performance Specification Test Date : 10-Mar-1987	
7. Continuous Monitor Comment :	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Continuous Monitoring System : Continuous Monitor 2

1. Parameter Code : O2	2. Pollutant :
3. CMS Requirement : OTHER	
4. Monitor Information : Manufacturer : Ametek Corp. Model Number : Thermox WDG Serial Number : CO36232-3	
5. Installation Date : 18-Dec-1986	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment :	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Continuous Monitoring System : Continuous Monitor 3

1. Parameter Code : EM	2. Pollutant : CO
3. CMS Requirement : RULE	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Information to be provided.	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Continuous Monitoring System : Continuous Monitor 4

1. Parameter Code : EM	2. Pollutant : NOX
3. CMS Requirement : RULE	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Information to be provided.	

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
Municipal Waste Combustor - Unit #3

Continuous Monitoring System : Continuous Monitor 5

1. Parameter Code : EM	2. Pollutant : SO2
3. CMS Requirement : RULE	
4. Monitor Information : Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : Information to be provided.	

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

Emissions Unit Information Section 3

Municipal Waste Combustor - Unit #3

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] 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.

2. Increment Consuming for Nitrogen Dioxide?

[ ] 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.

[X] None of the above apply. If so, 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 : C	SO2 : C	NO2 : E
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 3

Municipal Waste Combustor - Unit #3

Supplemental Requirements for All Applications

1. Process Flow Diagram :	App. A, Fig. 3
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	To be provided
4. Description of Stack Sampling Facilities :	To be provided
5. Compliance Test Report :	Vol. 2, App. E
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	Volume 2
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading) :	NA

12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA

14. Acid Rain Application (Hard-copy Required) :

NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 4

MWC Auxiliary Burner - Unit #1

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? 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, a 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.

[ ] 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.

Emissions Unit Information Section 4

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : MWC Auxiliary Burner - Unit #1		
2. Emissions Unit Identification Number : 004 [ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : Each MWC unit will be equipped with a natural-gas-fired auxiliary burner with a rated heat input capacity upgraded to about 60 MMBtu/hr. These burners are necessary for firing the combustor during startups and shutdowns, and to maintain furnace temperatures when sustained low-Btu wastes are encountered.		

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 4
MWC Auxiliary Burner - Unit #1

Emissions Unit Details

1. Initial Startup Date :	01-Oct-2000
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer : Information to be provided.	Model Number :
4. Generator Nameplate Rating :	MW
5. Incinerator Information :	
Dwell Temperature :	Degrees Fahrenheit
Dwell Time :	Seconds
Incinerator Afterburner Temperature :	Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	60	mmBtu/hr	
2. Maximum Incinerator Rate :		lb/hr	tons/day
3. Maximum Process or Throughput Rate :	600000	cf/hr	
4. Maximum Production Rate :			

5. Operating Capacity Comment :
The maximum short-term throughput is 60,000 cf/hr and on an annual basis the avg. throughput would be no more than 17,250 cf/hr. Although flexibility to use at any time is requested, actual use would be limited to start-up, shut-down and warm-up periods, and to no more than 10% of the total annual heat input to the combustor.

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :

24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 4
MWC Auxiliary Burner - Unit #1

Rule Applicability Analysis

Refer to Volume 2, Section 2, for Rule Applicability Analysis.

List of Applicable Regulations

Refer to Volume 2, Permit Application Text, Section 2, for List of Applicable Regulations.

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 4

MWC Auxiliary Burner - Unit #1

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	
2. Emission Point Type Code : 2	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point)	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :	
5. Discharge Type Code :	
6. Stack Height :	feet
7. Exit Diameter :	feet
8. Exit Temperature :	°F
9. Actual Volumetric Flow Rate :	acfm
10. Percent Water Vapor :	%
11. Maximum Dry Standard Flow Rate :	dscfm
12. Nonstack Emission Point Height :	feet
13. Emission Point UTM Coordinates : Zone : East (km) : North (km) :	
14. Emission Point Comment : Auxiliary burners would be used primariliy in conjunction with combustion of refuse during periods of startup, shutdown, and low-Btu wastes. Therefore, no separate stack parameters are given.	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 4

MWC Auxiliary Burner - Unit #1

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Auxiliary burner will use natural gas	
2. Source Classification Code (SCC) : 1-02-006-02	
3. SCC Units : Million Cubic Feet Burned (all gaseous fuels)	
4. Maximum Hourly Rate : 0.06	5. Maximum Annual Rate : 12.56
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 1,000	
10. Segment Comment :	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 4
MWC Auxiliary Burner - Unit #1

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - NOX			NS

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 4
MWC Auxiliary Burner - Unit #1

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **NOX**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 2.40 lb/hour 10.60 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60.44b(d)
7. Emissions Method Code : 5
8. Calculations of Emissions : Burner operating at 115% = 172.5 MMBtu/hr ,but restricted to 10 %/yr operation = 17.25 MMBtu/hr 200 lb/10^6 cf NG * 17,250,000 Btu/hr * 1 cf NG/1000 Btu = 3.45 lb/hr 3.45 lb/hr * 1 ton/2000 lb * 8760 hrs/yr = 15.1 tons/yr.
9. Pollutant Potential/Estimated Emissions Comment : Emission Factor: 200 lb/MMcu.ft. (ELSA does not print in Item #6.) These emissions are part of, and not in addition to, combustor emissions. Allowable emissions for combustors include auxiliary buners.

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 4
MWC Auxiliary Burner - Unit #1

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	20
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
Normal Conditions :	20 %
Exceptional Conditions :	%
Maximum Period of Excess Opacity Allowed :	min/hour
4. Method of Compliance :	
COM	
5. Visible Emissions Comment :	
FAC 62-296.320(4)(b)	

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

Emissions Unit Information Section 4

MWC Auxiliary Burner - Unit #1

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[ ] 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.

[X] 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.

2. Increment Consuming for Nitrogen Dioxide?

[X] 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, 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 : C	SO2 : C	NO2 : C
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 4

MWC Auxiliary Burner - Unit #1

Supplemental Requirements for All Applications

1. Process Flow Diagram :	App. A, Fig. 3
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	NA
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	Volume 2
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading) :	NA

12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA

14. Acid Rain Application (Hard-copy Required) :

NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 5

MWC Auxiliary Burner - Unit #2

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? 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, a 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.

[ ] 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.

Emissions Unit Information Section 5

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : MWC Auxiliary Burner - Unit #2		
2. Emissions Unit Identification Number : 005 [ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : Each MWC unit will be equipped with a natural-gas-fired auxiliary burner with a rated heat input capacity upgraded to about 60 MMBtu/hr. These burners are necessary for firing the combustor during startups and shutdowns, and to maintain furnace temperatures when sustained low-Btu wastes are encountered.		

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 5
MWC Auxiliary Burner - Unit #2

Emissions Unit Details

1. Initial Startup Date :	01-Oct-2000
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer : Information to be provided.	Model Number :
4. Generator Nameplate Rating :	MW
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	60	mmBtu/hr	
2. Maximum Incinerator Rate :		lb/hr	tons/day
3. Maximum Process or Throughput Rate :	600000	cf/hr	
4. Maximum Production Rate :			
5. Operating Capacity Comment : The maximum short-term throughput is 60,000 cf/hr and on an annual basis the avg. throughput would be no more than 17,250 cf/hr. Although flexibility to use at any time is requested, actual use would be limited to start-up, shut-down and warm-up periods, and to no more than 10% of the total annual heat input to the combustor.			

Emissions Unit Operating Schedule

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

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 5
MWC Auxiliary Burner - Unit #2

Rule Applicability Analysis

Refer to Volume 2, Section 2, for Rule Applicability Analysis.

List of Applicable Regulations

Refer to Volume 2, Permit Application Text, Section 2, for List of Applicable Regulations.

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 5

MWC Auxiliary Burner - Unit #2

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	
2. Emission Point Type Code : 2	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point)	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :	
5. Discharge Type Code :	
6. Stack Height :	feet
7. Exit Diameter :	feet
8. Exit Temperature :	°F
9. Actual Volumetric Flow Rate :	acfm
10. Percent Water Vapor :	%
11. Maximum Dry Standard Flow Rate :	dscfm
12. Nonstack Emission Point Height :	feet
13. Emission Point UTM Coordinates : Zone : East (km) : North (km) :	
14. Emission Point Comment : Auxiliary burners would be used primariliy in conjunction with combustion of refuse during periods of startup, shutdown, and low-Btu wastes. Therefore, no separate stack parameters are given.	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 5

MWC Auxiliary Burner - Unit #2

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Auxiliary burner will use natural gas	
2. Source Classification Code (SCC) : 1-02-006-02	
3. SCC Units : Million Cubic Feet Burned (all gaseous fuels)	
4. Maximum Hourly Rate : 0.06	5. Maximum Annual Rate : 12.56
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 1,000	
10. Segment Comment :	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 5
MWC Auxiliary Burner - Unit #2

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - NOX			NS

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 5
MWC Auxiliary Burner - Unit #2

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **NOX**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 3.45 lb/hour 15.10 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60.44b(d)
7. Emissions Method Code : 5
8. Calculations of Emissions : Burner operating at 115% = 172.5 MMBtu/hr ,but restricted to 10 %/yr operation = 17.25 MMBtu/hr 200 lb/10^6 cf NG * 17,250,000 Btu/hr * 1 cf NG/1000 Btu = 3.45 lb/hr 3.45 lb/hr * 1 ton/2000 lb * 8760 hrs/yr = 15.1 tons/yr.
9. Pollutant Potential/Estimated Emissions Comment : Emission Factor: 200 lb/MMcu.ft. (ELSA does not print in Item #6.) These emissions are part of, and not in addition to, combustor emissions. Allowable emissions for combustors include auxiliary buners.

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 5
MWC Auxiliary Burner - Unit #2

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	20
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
Normal Conditions :	20 %
Exceptional Conditions :	%
Maximum Period of Excess Opacity Allowed :	min/hour
4. Method of Compliance :	
COM	
5. Visible Emissions Comment :	
FAC 62-296.320(4)(b)	

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

Emissions Unit Information Section 5

MWC Auxiliary Burner - Unit #2

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[ ] 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.

[X] 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.

2. Increment Consuming for Nitrogen Dioxide?

[X] 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, 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 : C	SO2 : C	NO2 : C
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

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L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 5

MWC Auxiliary Burner - Unit #2

Supplemental Requirements for All Applications

1. Process Flow Diagram :	App. A, Fig. 3
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	NA
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	Volume 2
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading) :	NA

12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA

14. Acid Rain Application (Hard-copy Required) :

NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

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III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 6

MWC Auxiliary Burner - Unit #3

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? 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, a 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.

[ ] 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.

Emissions Unit Information Section 6

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : MWC Auxiliary Burner - Unit #3		
2. Emissions Unit Identification Number : 006 [ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : Each MWC unit will be equipped with a natural-gas-fired auxiliary burner with a rated heat input capacity upgraded to about 60 MMBtu/hr. These burners are necessary for firing the combustor during startups and shutdowns, and to maintain furnace temperatures when sustained low-Btu wastes are encountered.		

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 6
MWC Auxiliary Burner - Unit #3

Emissions Unit Details

1. Initial Startup Date :	01-Oct-2000
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer : Information to be provided.	Model Number :
4. Generator Nameplate Rating :	MW
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	60	mmBtu/hr	
2. Maximum Incinerator Rate :		lb/hr	tons/day
3. Maximum Process or Throughput Rate :	600000	cf/hr	
4. Maximum Production Rate :			

5. Operating Capacity Comment :
The maximum short-term throughput is 60,000 cf/hr and on an annual basis the avg. throughput would be no more than 17,250 cf/hr. Although flexibility to use at any time is requested, actual use would be limited to start-up, shut-down and warm-up periods, and to no more than 10% of the total annual heat input to the combustor.

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :

24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 6
MWC Auxiliary Burner - Unit #3

Rule Applicability Analysis

Refer to Volume 2, Section 2, for Rule Applicability Analysis.

List of Applicable Regulations

Refer to Volume 2, Permit Application Text, Section 2, for List of Applicable Regulations.

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 6

MWC Auxiliary Burner - Unit #3

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	
2. Emission Point Type Code : 2	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point)	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :	
5. Discharge Type Code :	
6. Stack Height :	feet
7. Exit Diameter :	feet
8. Exit Temperature :	°F
9. Actual Volumetric Flow Rate :	acfm
10. Percent Water Vapor :	%
11. Maximum Dry Standard Flow Rate :	dscfm
12. Nonstack Emission Point Height :	feet
13. Emission Point UTM Coordinates : Zone : East (km) : North (km) :	
14. Emission Point Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 6

MWC Auxiliary Burner - Unit #3

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Auxiliary burner will use natural gas	
2. Source Classification Code (SCC) : 1-02-006-02	
3. SCC Units : Million Cubic Feet Burned (all gaseous fuels)	
4. Maximum Hourly Rate : 0.06	5. Maximum Annual Rate : 12.56
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 1,000	
10. Segment Comment :	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 6
MWC Auxiliary Burner - Unit #3

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - NOX			NS

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 6
MWC Auxiliary Burner - Unit #3

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **NOX**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 3.45 lb/hour 15.10 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : 40 CFR 60.44b(d)
7. Emissions Method Code : 5
8. Calculations of Emissions : Burner operating at 115% = 172.5 MMBtu/hr ,but restricted to 10 %/yr operation = 17.25 MMBtu/hr 200 lb/10^6 cf NG * 17,250,000 Btu/hr * 1 cf NG/1000 Btu = 3.45 lb/hr 3.45 lb/hr * 1 ton/2000 lb * 8760 hrs/yr = 15.1 tons/yr.
9. Pollutant Potential/Estimated Emissions Comment : Emission Factor: 200 lb/MMcu.ft. (ELSA does not print in Item #6.) These emissions are part of, and not in addition to, combustor emissions. Allowable emissions for combustors include auxiliary buners.

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 6
MWC Auxiliary Burner - Unit #3

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	20
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
Normal Conditions :	20 %
Exceptional Conditions :	%
Maximum Period of Excess Opacity Allowed :	min/hour
4. Method of Compliance :	
COM	
5. Visible Emissions Comment :	
FAC 62-296.320(4)(b)	

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

Emissions Unit Information Section 6

MWC Auxiliary Burner - Unit #3

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[ ] 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.

[X] 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.

2. Increment Consuming for Nitrogen Dioxide?

[X] 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, 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 : C	SO2 : C	NO2 : C
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 6

MWC Auxiliary Burner - Unit #3

Supplemental Requirements for All Applications

1. Process Flow Diagram :	App. A, Fig. 3
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	NA
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	Volume 2
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading) :	NA

12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA

14. Acid Rain Application (Hard-copy Required) :

NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 7

Ash Building and Handling Systems

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? 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).

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a 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.

[ ] 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.

Emissions Unit Information Section 7

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Ash Building and Handling Systems		
2. Emissions Unit Identification Number : 007 [ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment :		

Emissions Unit Information Section 7
Ash Building and Handling Systems

Emissions Unit Control Equipment 1

1. Description : Fabric filter on building exhaust vent.
2. Control Device or Method Code : 18

Emissions Unit Information Section 7
Ash Building and Handling Systems

Emissions Unit Control Equipment 2

1. Description : Enclosed building and conveyance systems.
2. Control Device or Method Code : 54

Emissions Unit Information Section 7
Ash Building and Handling Systems

Emissions Unit Control Equipment 3

1. Description : Ash is wet and building has water sprays.
2. Control Device or Method Code : 61

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 7
Ash Building and Handling Systems

Emissions Unit Details

1. Initial Startup Date :	18-Dec-1986
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer :	Model Number :
4. Generator Nameplate Rating :	MW
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	100800	tons per year
4. Maximum Production Rate :		
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

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 7
Ash Building and Handling Systems

Rule Applicability Analysis

Refer to Volume 2, Section 2, for Rule Applicability Analysis.

List of Applicable Regulations

Refer to Volume 2, Permit Application Text, Section 2, for Applicable Regulations

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 7

Ash Building and Handling Systems

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :		
2. Emission Point Type Code :	3	
3. Descriptions of Emission Points Comprising this Emissions Unit : Particulate matter emissions from fabric filter on building exhaust vent		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Ash handling building and conveyance systems		
5. Discharge Type Code :	R	
6. Stack Height :	5	feet
7. Exit Diameter :	2.00	feet
8. Exit Temperature :	77	°F
9. Actual Volumetric Flow Rate :	12,000	acfm
10. Percent Water Vapor :	5.00	%
11. Maximum Dry Standard Flow Rate :		dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : East (km) : North (km) :		
14. Emission Point Comment : The ash handling building and systems are existing, and will not be altered.		

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 7

Ash Building and Handling Systems

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Quenched ash has metals removed, and is loaded into trucks for transport to disposal.	
2. Source Classification Code (SCC) : 5-01-999-99	
3. SCC Units : Tons Processed	
4. Maximum Hourly Rate :	5. Maximum Annual Rate : 100,800.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment : This is an existing process that would not change with the Retrofit.	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 7
Ash Building and Handling Systems

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	018		EL
2 - PM	061	054	NS

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 7
Ash Building and Handling Systems

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : lb/hour tons/year
4. Synthetically Limited? [ ] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference :
7. Emissions Method Code :
8. Calculations of Emissions :
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 7
Ash Building and Handling Systems

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : lb/hour tons/year
4. Synthetically Limited? [ ] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference :
7. Emissions Method Code :
8. Calculations of Emissions :
9. Pollutant Potential/Estimated Emissions Comment : Visible emissions (5% opacity) will occur less than 5 percent of the time from ash transfer systems, except during periods of maintenance and repair, in accordance with the Emission Guidelines.

Emissions Unit Information Section 7
Ash Building and Handling Systems

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :
2. Future Effective Date of Allowable Emissions :
3. Requested Allowable Emissions and Units :
4. Equivalent Allowable Emissions : lb/hour tons/year
5. Method of Compliance :
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Visible emissions (5% opacity) will occur less than 5 percent of the time from ash transfer systems, except during periods of maintenance and repair, in accordance with the Emission Guidelines.

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 7
Ash Building and Handling Systems

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	05		
2. Basis for Allowable Opacity :	RULE		
3. Requested Allowable Opacity :			
Normal Conditions :	5	%	
Exceptional Conditions :		%	
Maximum Period of Excess Opacity Allowed :	3	min/hour	
4. Method of Compliance :			
Method 22			
5. Visible Emissions Comment :			

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

Emissions Unit Information Section 7

Ash Building and Handling Systems

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] 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.

2. Increment Consuming for Nitrogen Dioxide?

[ ] 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, 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 : C	SO2 :	NO2 :
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 7

Ash Building and Handling Systems

Supplemental Requirements for All Applications

1. Process Flow Diagram :	App. A, Fig. 3
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	to be provided
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	Volume 2
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading) :	NA

12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA

14. Acid Rain Application (Hard-copy Required) :

NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 8

Lime Silo

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? 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, a 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.

[ ] 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.

Emissions Unit Information Section 8

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Lime Silo		
2. Emissions Unit Identification Number : 008 [ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : A lime storage silo will be equipped with a FF system designed for an outlet grain loading of 0.030 gr/dscf or less.		

Emissions Unit Information Section 8
Lime Silo

Emissions Unit Control Equipment 1

1. Description : Fabric filter designed for an outlet grain loading of 0.03 gr/dscf or less.
2. Control Device or Method Code : 18

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 8
Lime Silo

Emissions Unit Details

1. Initial Startup Date :	01-Oct-2000
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer : Information to be provided.	Model Number :
4. Generator Nameplate Rating :	MW
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	4200	tons/yr
4. Maximum Production Rate :		
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

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 8
Lime Silo

Rule Applicability Analysis

Refer to Volume 2, Section 2, for Rule Applicability Analysis.

List of Applicable Regulations

Refer to Volume 2, Permit Application Text, Section 2, for List of Applicable Regulations.

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 8

Lime Silo

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Lime Storage Silo	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Baghouse vent on the lime silo. Doorway for trucks to enter.		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :		
5. Discharge Type Code :	F	
6. Stack Height :		feet
7. Exit Diameter :		feet
8. Exit Temperature :	77	°F
9. Actual Volumetric Flow Rate :		acfm
10. Percent Water Vapor :		%
11. Maximum Dry Standard Flow Rate :		dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : East (km) : North (km) :		
14. Emission Point Comment : Emissions would occur during the unloading of one 20-ton truck per hour. Design information has not yet been developed.		

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 8

Lime Silo

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Temporary storage of lime	
2. Source Classification Code (SCC) :	
3. SCC Units : Tons Stored	
4. Maximum Hourly Rate :	5. Maximum Annual Rate : 4,380.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment : The annual usage of lime is based on 20 lb of lime for every ton of refuse.	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 8
Lime Silo

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	018		EL

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 8
Lime Silo

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 0.31 lb/hour 1.35 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : Vol. 1, Sec. 2
7. Emissions Method Code : 0
8. Calculations of Emissions : 0.030 gr/dscf *1200 dscfm * 1 lb/7000 gr * 60 min/hr = 0.154 lb/hr 0.154 lb/hr * 1 ton/2000 lbs * 8760 hrs/yr = 1.35 ton/yr
9. Pollutant Potential/Estimated Emissions Comment : Emission factor = 0.030 gr/dscf (ELSA does not print this in Item #6.)

Emissions Unit Information Section 8
Lime Silo

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.03	gr/dscf		
4. Equivalent Allowable Emissions :	0.31	lb/hour	1.35	tons/year
5. Method of Compliance : No visible emissions (VE exemptions)				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : FAC 62-296.711(2)(b) PM RACT for silos Method 9 Visible Emissions test requested in lieu of stack test.				

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 8
Lime Silo

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	5
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
Normal Conditions :	5 %
Exceptional Conditions :	%
Maximum Period of Excess Opacity Allowed :	min/hour
4. Method of Compliance :	
Annual test; Method 9	
5. Visible Emissions Comment :	
FAC 62-297.620(4)	

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

Emissions Unit Information Section 8

Lime Silo

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[ ] 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.

[X] 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.

2. Increment Consuming for Nitrogen Dioxide?

[ ] 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, 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 : C	SO2 :		NO2 :
4. Baseline Emissions :			
PM :	0.0000	lb/hour	tons/year
SO2 :		lb/hour	tons/year
NO2 :			tons/year
5. PSD Comment :			

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 8

Lime Silo

Supplemental Requirements for All Applications

1. Process Flow Diagram :	App. A, Fig. 3
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	To be provided
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	Volume 2
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading) :	NA

12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA

14. Acid Rain Application (Hard-copy Required) :

NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 9

Carbon Silo

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

2. Single Process, Group of Processes, or Fugitive Only? 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, a 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.

[ ] 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.

Emissions Unit Information Section 9

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Carbon Silo		
2. Emissions Unit Identification Number : 009 [ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 49
6. Emissions Unit Comment : A carbon silo will be equipped with a FF system designed for an outlet grain loading of 0.030 gr/dscf or less.		

Emissions Unit Information Section 9
Carbon Silo

Emissions Unit Control Equipment 1

1. Description : Fabric filter designed for an outlet grain loading of 0.030 gr/dscf or less.
2. Control Device or Method Code : 18

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 9
Carbon Silo

Emissions Unit Details

1. Initial Startup Date :	01-Oct-2000	
2. Long-term Reserve Shutdown Date :		
3. Package Unit : Manufacturer : Information to be provided.		Model Number :
4. Generator Nameplate Rating :	MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :		 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	210	tons/yr
4. Maximum Production Rate :		
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

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 9
Carbon Silo

Rule Applicability Analysis

Refer to Volume 2, Section 2, for Rule Applicability Analysis.

List of Applicable Regulations

Refer to Volume 2, Permit Application Text, Section 2, for List of Applicable Regulations.

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 9

Carbon Silo

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Carbon Silo	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking : (limit to 100 characters per point) Baghouse vent on the activated carbon silo. Doorway for trucks to enter.		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :		
5. Discharge Type Code :	F	
6. Stack Height :		feet
7. Exit Diameter :		feet
8. Exit Temperature :	77	°F
9. Actual Volumetric Flow Rate :		acfm
10. Percent Water Vapor :		%
11. Maximum Dry Standard Flow Rate :		dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : East (km) : North (km) :		
14. Emission Point Comment : Emissions would occur during the unloading of one 20-ton truck per hour. Design information has not yet been developed.		

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 9

Carbon Silo

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Temporary storage of activated carbon	
2. Source Classification Code (SCC) :	
3. SCC Units : Tons Stored	
4. Maximum Hourly Rate :	5. Maximum Annual Rate : 219.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment : The annual usage of carbon is based on 1 lb of activated carbon for every ton of refuse.	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 9
Carbon Silo

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	018		EL

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 9
Carbon Silo

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 0.31 lb/hour 1.35 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor : Reference : Vol. 2, Sec. 2
7. Emissions Method Code : 0
8. Calculations of Emissions : 0.030 gr/dscf *1200 dscfm * 1 lb/7000 gr * 60 min/hr = 0.154 lb/hr 0.154 lb/hr * 1 ton/2000 lbs * 8760 hrs/yr = 1.35 ton/yr
9. Pollutant Potential/Estimated Emissions Comment : Emission Factor: 0.03 gr/dscf (ELSA does not print in Item #6.)

Emissions Unit Information Section 9
Carbon Silo

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.03	gr/dscf		
4. Equivalent Allowable Emissions :	0.31	lb/hour	1.35	tons/year
5. Method of Compliance : No visible emissions (VE exemptions)				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : FAC 62-296.711(2)(b) PM RACT for silos Method 9 vistible emission test requested in lieu of stack test.				

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 9
Carbon Silo

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	5
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
Normal Conditions :	5 %
Exceptional Conditions :	%
Maximum Period of Excess Opacity Allowed :	min/hour
4. Method of Compliance :	
Annual test; Method 9	
5. Visible Emissions Comment :	
FAC 62-297.620(4)	

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

Emissions Unit Information Section 9

Carbon Silo

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[ ] 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.

[X] 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.

2. Increment Consuming for Nitrogen Dioxide?

[ ] 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, 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 : C	SO2 :	NO2 :	
4. Baseline Emissions :			
PM :	0.0000 lb/hour		tons/year
SO2 :	lb/hour		tons/year
NO2 :			tons/year
5. PSD Comment :			

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 9

Carbon Silo

Supplemental Requirements for All Applications

1. Process Flow Diagram :	App. A, Fig. 3
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	To be provided
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	Volume 2
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

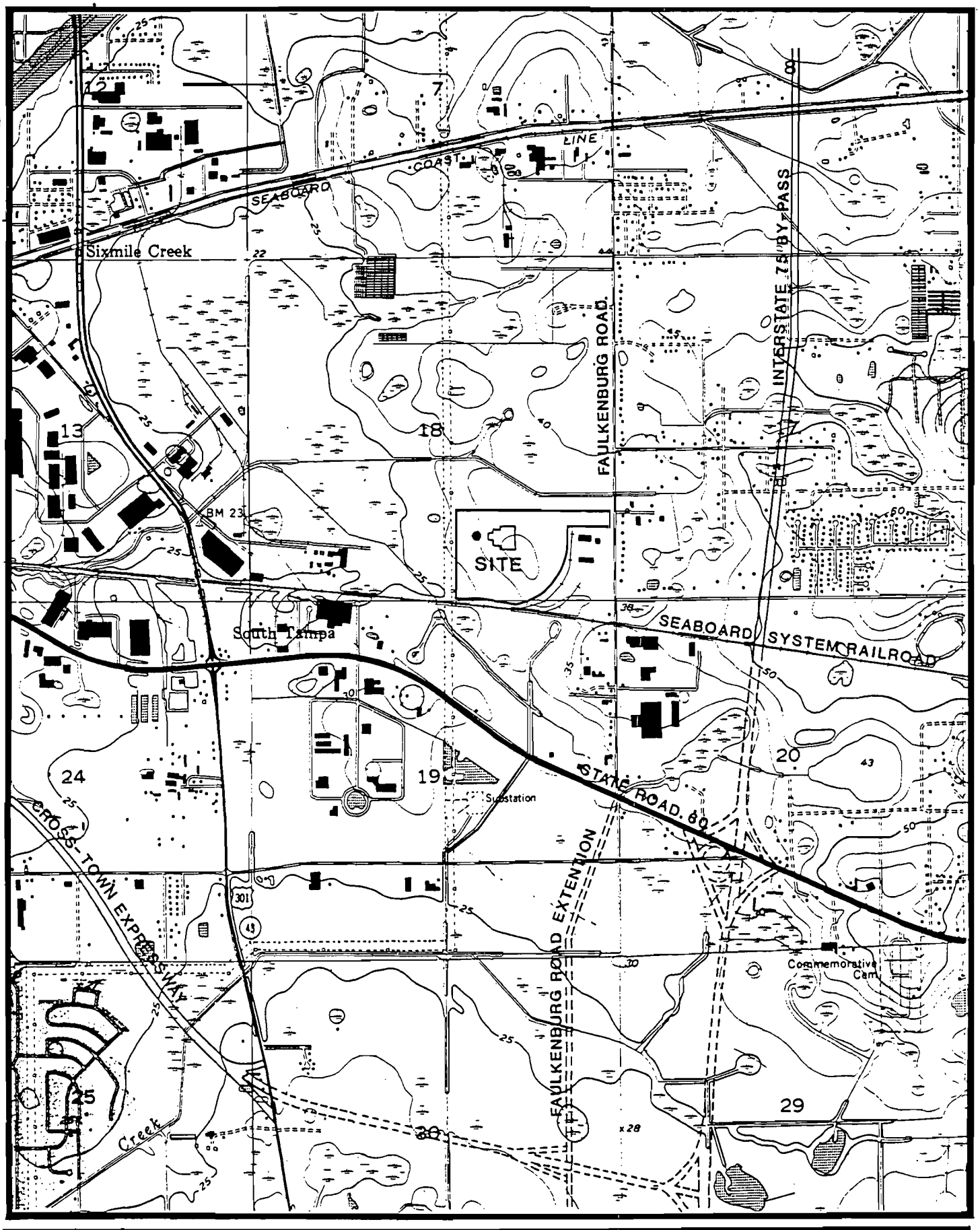
10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading) :	NA

12. Identification of Additional Applicable Requirements :	NA
13. Compliance Assurance Monitoring Plan :	NA

14. Acid Rain Application (Hard-copy Required) :

NA	Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

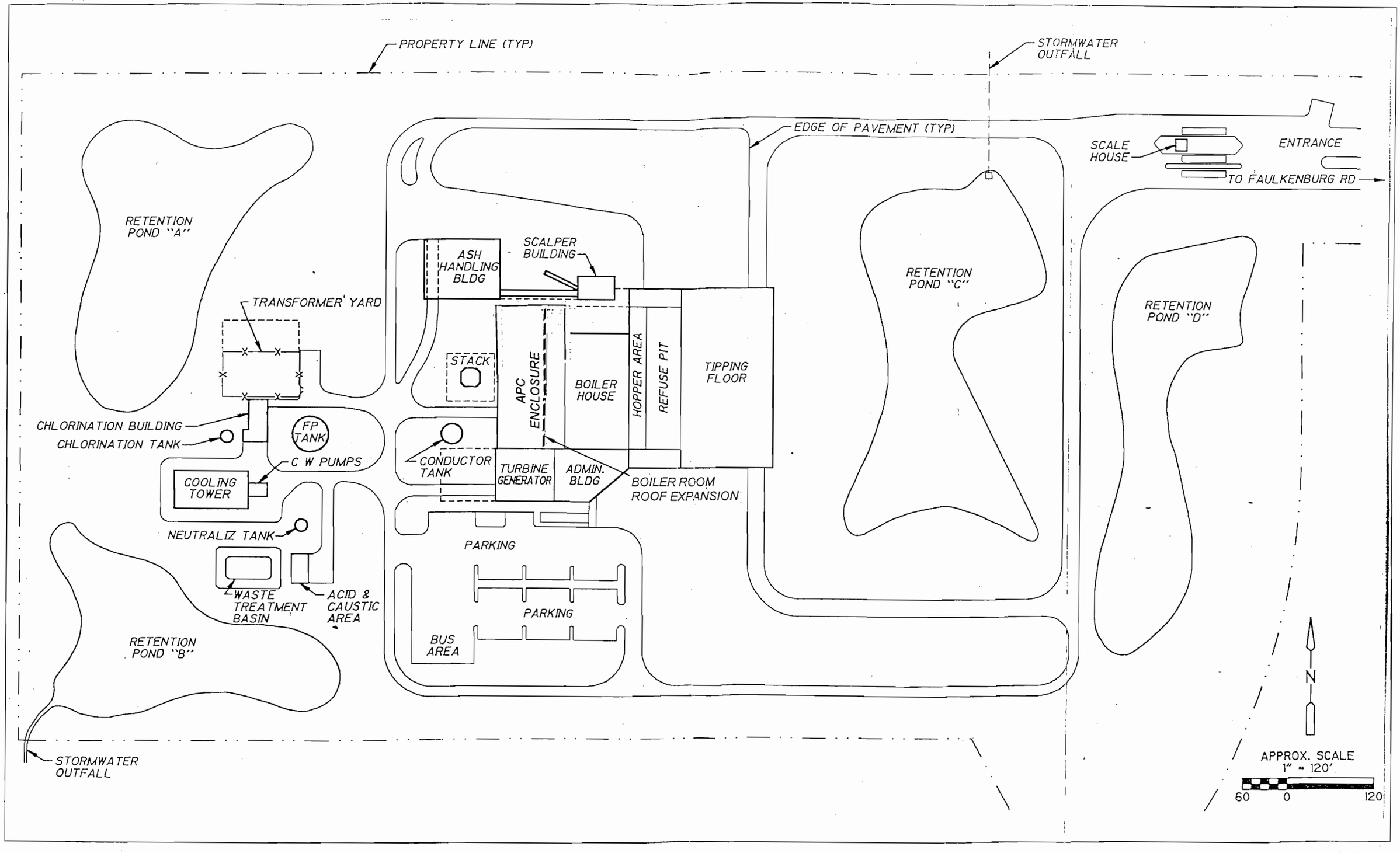
Appendix A



HILLSBOROUGH COUNTY
ENERGY RECOVERY PROJECT

Figure 1
Site Boundaries

1000 0 1000 2000 3000 FEET



Hillsborough County
Solid Waste Energy Recovery Facility

Figure 2
Existing and Future Facility Layout

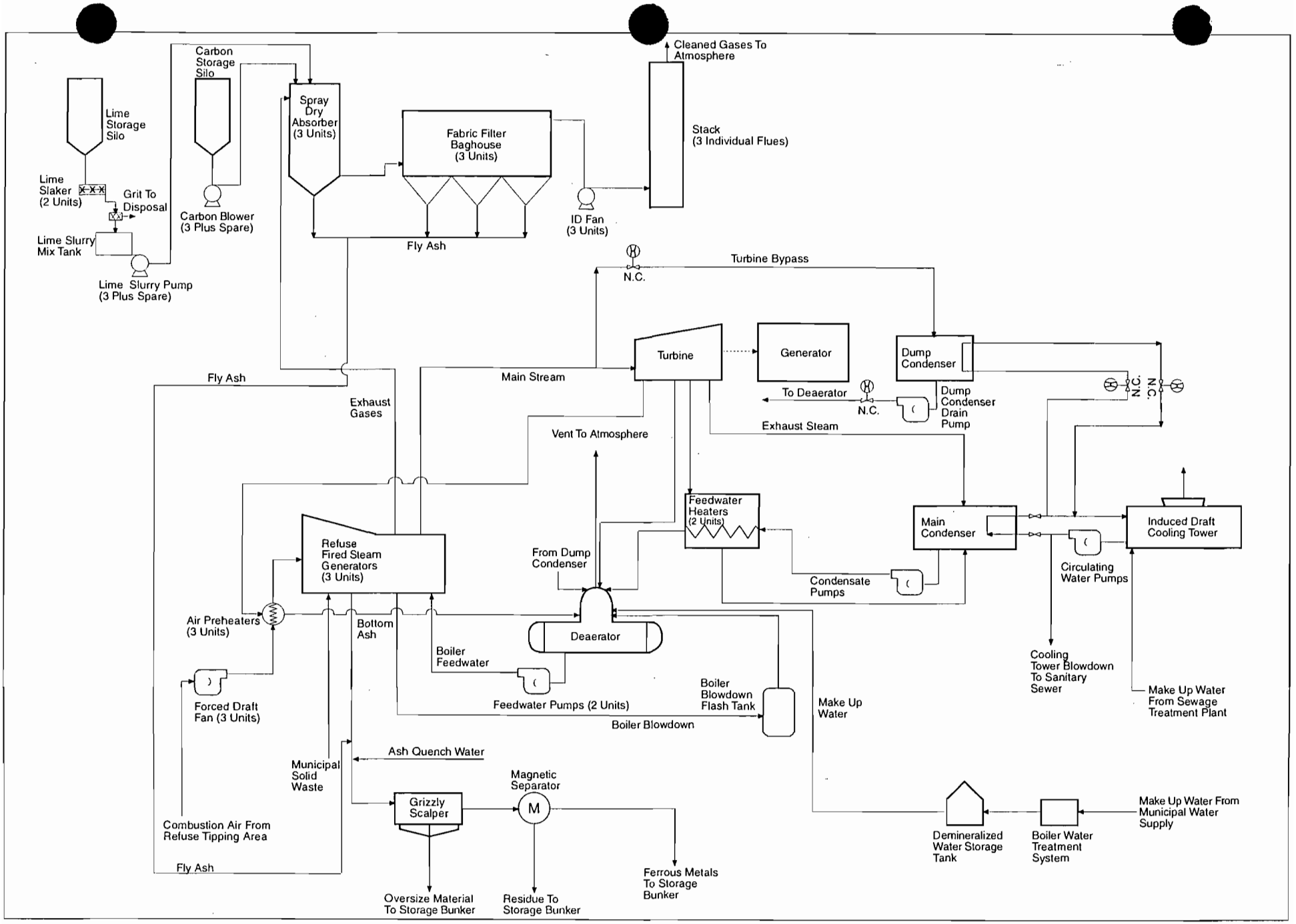


Figure 3
Hillsborough County Solid Waste Resource Recovery Facility
Overall Process Flow Diagram

CDM Camp Dresser & McKee

Appendix A
Attachment 1

Precautions to Prevent Emissions of Unconfined Particulate Matter

Precautions include the following:

- Roads, parking area and yards are paved.
- A street sweeper equipped with a vacuum system is used to remove particulate matter from roads and other paved areas.
- The unpaved areas of the facility are maintained and either sodded or landscaped.
- The combustion system is maintained under negative pressure.
- Enclosed hoods, fans, filters, or similar equipment is used to contain and capture particulate matter.
- The bottom and fly ash conveyor systems are totally enclosed.
- The ash is wetted before being stored in the ash storage building.
- Ash is loaded into trucks inside a totally enclosed building equipped with a dust collector.

Appendix A
Attachment 2

List of Potential Fugitive Emissions

The following processes have been identified as contributing to fugitive emissions:

- Mobile operating equipment including the front-end loaders, street sweeper and forklift.
- The Cooling Tower evaporation and drift.
- Yard waste composting on site.
- Ash truck loading.
- Operation of refuse, ash and compost trucks and vehicles.