PINELLAS COUNTY RESOURCE RECOVERY FACILITY
AIR POLLUTION CONTROL RETROFIT PROJECT
14 S. FORT HARRISON AVE. 5TH FLOOR
CLEARWATER, FL 34616
PHONE: (813) 464-4913
FAX: (813) 464-3944

June 13, 1996

Mr. John C. Brown, Jr.
Florida Department of Environmental Protection
111. S. Magnolia Dr., Suite 4
Tallahassee, FL. 32301

VIA FEDERAL EXPRESS

RE: PCRRF Title V Permit Application

Dear Mr. Brown:

Enclosed for your consideration are four (4) copies of the referenced application. Each copy includes an original signature page signed by the Responsible Official, Mr. Michael J. Rudd, Director, Solid Waste Operations for Pinellas County.

Should you have any questions about this application, please contact me personally at the above address.

Sincerely,

Russell Menke
Project Facilitator

Enclosure

cc: Mike Rudd, Solid Waste Operations
David Dee, Landers & Parsons
Pete Stasis, HDR Engineering
Don Elias, RTP Environmental Associates, Inc.
John Neil, Wheelabrator Pinellas Inc.

STATE OF FLORIDA
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

Pinellas County Resource Recovery Facility
and continguous Pinellas County solid waste operations
located in St. Petersburg, Pinellas County, FL

Note: Data were entered with the Department's electronic system ELSA and then printed. Places where ELSA did not print or incorrectly printed information are entered/corrected by hand or typed in. Since ELSA prints information as entered, some portions of Section III were reordered as appropriate and then renumbered.

Owner/Authorized Representative or Responsible Official

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

Name : Michael J. Rudd
Title : Director, Solid Waste Management

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

Organization/Firm : Pinellas Co/Solid Waste Management Dept
Street Address : 3095 - 114th Avenue North
City : St Petersburg
State : FL Zip Code : 33716-____

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

Telephone : (813)464-7565 Fax : (813)464-7713

4. Owner/Authorized Representative or Responsible Official Statement :

I, the undersigned, am the owner or authorized representative of the facility (non-Title V source) addressed in this Application for Air Permit or the responsible official, as defined in Chapter 62-213, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. Further, I agree to operate and maintain the air pollutant emissions units and air pollution control equipment described in this application so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. If the purpose of this application is to obtain an air operation permit or operation permit revision for one or more emissions units which have undergone construction or modification, I certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.*

Michael J Rudd
Signature

6/13/96
Date

* Attach letter of authorization if not currently on file.

Scope of Application

Emissions Unit ID	Description of Emissions Unit
01	Mass Burn Incinerator Unit 1
02	Mass Burn Incinerator Unit 2
03	Mass Burn Incinerator Unit 3
04	Hydrated Lime Storage Silo - RRF Water Softening Area
No Id	Engine Generator - Mulching Area
No Id	Cyclone/wet scrubber for metals recovery system

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 :

[X] 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 :

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

Current operation permit number(s), if any :

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential

emissions of one or more existing, permitted emissions units.

Current operation permit number(s) :

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

Application Processing Fee

Attached - Amount : NA

Construction/Modification Information

1. Description of Proposed Project or Alterations :
2. Projected or Actual Date of Commencement of Construction :
3. Projected Date of Completion of Construction :

Professional Engineer Certification

1. Professional Engineer Name : Robert Peter Stasis

   Registration Number : 0046220

2. Professional Engineer Mailing Address :

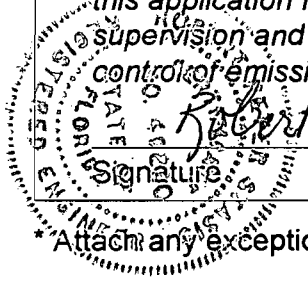
   Organization/Firm : HDR Engineering, Inc.
   Street Address : 5100 W. Kennedy Blvd., Ste 300
   City : Tampa
   State : FL Zip Code : 33609-1806

3. Professional Engineer Telephone Numbers :

   Telephone : (813)287-1960 Fax : (813)282-2440

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 (a) 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 in the Florida Statues and rules of the Department of Environmental Protection; or (b) for any application for a TitleV source air operation permit, that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in the application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application;
(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application; and
(3) For any application for an air construction permit for one or more proposed new or modified emissions units, the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.



Robert P. Stasis — Signature

6/13/96 — Date

* Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact :

Name : Donald F. Elias
Title : Principal

2. Application Contact Mailing Address :

Organization/Firm : RTP Environmental Associates, Inc.
Street Address : 239 US Highway 22 East
City : Green Brook
State : NJ Zip Code : 08812-____

3. Application Contact Telephone Numbers :

Telephone : (908)968-9600 Fax : (908)968-9603

Application Comment

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

Currently, emissions are controlled by ESPs. A permit amendment to upgrade the facility to meet the Emission Guideline (EG) requirements (40 CFR 60 Subpart Cb) was signed 10/11/95. Since revisions to State regulations have not been enacted, this application contains existing permit requirements only. Upon completion of the facility improvements, an application to modify the operating permit will be submitted which includes Subpart Cb requirements.

In addition to the MWCs, there is a small water softening plant at the PCRRF. Construction/operating permits for the water softening plant lime storage silo are Permit Nos. AC52-259351/AO52-268853. Also, Resource Recycling, LLC. owns and operates a metal recovery system onsite which removes metals from the MWC ash. Data for the cyclone/wet scrubber serving this system are included herein for completeness.

Continguous to the PCRRF is the Pinellas County municipal landfill and other solid waste operations. Since they have the same SIC code (4953), same owner (Pinellas County), and are contiguous to the RRF property, they must be considered as part of the same facility as the MWCs for regulatory purposes. Federal EG requirements for landfills were promulgated 3/12/96 (40 CFR 60 Subpart Cc) so fugitive VOC landfill emissions were quantified for determining total facility emissions. An application to modify the operating permit for landfill EG requirements will be submitted when the State regulations adopt Subpart Cc.

Other solid waste operations include yard waste mulching. A trommel diesel engine, which does not have a permit and currently operates more than 400 hrs/yr, is included herein. Pinellas County is requesting the Department to process the application for this minor source also for a construction permit.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Name, Location, and Type

1. Facility Owner or Operator :
PinellasCo Board of County Commissioners

2. Facility Name : Pinellas Co Resource Recovery Facility

3. Facility Identification Number : 1030117

4. Facility Location Information :

Pinellas County Resource Recovery Facility
and continguous Pinellas County solid waste operations
located in St. Petersburg, Pinellas County, FL

Facility Street Address : 3001 - 110th Avenue North
City : St. Petersburg
County : Pinellas Zip Code : 33716-____

5. Facility UTM Coordinates :

Zone : 17 East (km) : 335.20 North (km) : 3084.10

6. Facility Latitude/Longitude :

Latitude (DD/MM/SS) : 27 52 23 Longitude (DD/MM/SS) : 82 40 25

7. Governmental Facility Code :	8. Facility Status Code :	9. Relocatable Facility ?	10. Facility Major Group SIC Code :
3	A	N	49

11. Facility Comment :

Facility Contact

1. Name and Title of Facility Contact :

Name : George Woodward
Title : Plant Manager

2. Facility Contact Mailing Address :

Organization/Firm : Wheelabrator Pinellas, Inc.
Street Address : 3001 - 110th Avenue North
City : St. Petersburg
State : FL Zip Code : 33716-____

3. Facility Contact Telephone Numbers :

Telephone : (813)572-9163 Fax : (813)572-4370

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 :

Mass burn incinerators 1 to 3 are subject only to the NSPS given at 40 CFR 60, Subpart E (and the NSPS General Provisions of Subpart A). NSPS given at 40 CFR 60, Subparts Db and Ea are not applicable since construction commenced prior to June 19, 1984 for all three units. Also, solid waste incinerators are required to obtain Title V permits (i.e., EPA designated Title V sources) pursuant to section 129(e) of the Clean Air Act (see 40 CFR 70.3(b)).

B. FACILITY REGULATIONS

Rule Applicability Analysis

Not required for Title V source application

B. FACILITY REGULATIONS

List of Applicable Regulations

see Attachment 1 for applicable regulations

C. FACILITY POLLUTANT INFORMATION

Facility Pollutant Information Pollutant 1

1. Pollutant Emitted : VOC
2. Estimated Emissions : 50.3000 (tons/year)
3. Requested Emissions Cap : (lbs/hour) (tons/year)
4. Basis for Emissions Cap Code :
5. Facility Pollutant Comment : Maximum fugitive VOC emissions from Pinellas County landfill during potential window of initial Title V permit (1996-2004), which are not addressed in Subsection III-E (see Attachment 10).

D. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

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

Additional Supplemental Requirements for Category I Applications Only

7. List of Insignificant Activities :	6
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. Enhanced Monitoring Plan :	7
12. Risk Management Plan Verification :	NA
13. Compliance Report and Plan :	8
14. Compliance Statement (Hard-copy Required) :	9

III. EMISSIONS UNIT INFORMATION

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Information Section 1

Mass Burn Incinerator Unit 1

Type of Emissions Unit Addressed in This Section

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.

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

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

III. EMISSIONS UNIT INFORMATION

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Information Section 2

Mass Burn Incinerator Unit 2

Type of Emissions Unit Addressed in This Section

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.

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

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

III. EMISSIONS UNIT INFORMATION

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Type of Emissions Unit Addressed in This Section

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.

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

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

III. EMISSIONS UNIT INFORMATION

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Information Section 4

Hydrated Lime Storage Silo - RRF Water Softening Area

Type of Emissions Unit Addressed in This Section

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.

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

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

III. EMISSIONS UNIT INFORMATION

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Information Section 5

Engine Generator - Mulching Area

Type of Emissions Unit Addressed in This Section

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.

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

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

III. EMISSIONS UNIT INFORMATION

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Information Section 6

Cyclone/wet scrubber for metals recovery system

Type of Emissions Unit Addressed in This Section

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, an individually-regulated emission point (stack or vent) serving a single process or production unit, or activity, which also has other individually-regulated emission points.

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

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Information Section 1

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Mass Burn Incinerator Unit 1		
2. ARMS Identification Number : 01		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? N	5. Emissions Unit Major Group SIC Code : 49
6. Initial Startup Date : 04-May-1983		
7. Long-term Reserve Shutdown Date :		
8. Package Unit : Manufacturer : Riley Stoker Model Number : 80019		
9. Generator Nameplate Rating : ~~51~~ 50.9 MW		
10. Incinerator Information : Dwell Temperature : 1800 °F Dwell Time : 1.00 seconds Incinerator Afterburner Temperature : °F		
11. Emissions Unit Comment : Shares stack and turbine with Unit 2. Generator nameplate rating is for shared turbine (i.e., combined steam outputs for MWC units 1 and 2).		

Emissions Unit Information Section 2

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Mass Burn Incinerator Unit 2		
2. ARMS Identification Number : 02		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? N	5. Emissions Unit Major Group SIC Code : 49
6. Initial Startup Date : 04-May-1983		
7. Long-term Reserve Shutdown Date :		
8. Package Unit : Manufacturer : Riley Stoker Model Number : 80020		
9. Generator Nameplate Rating : ~~51~~ 50.9 MW		
10. Incinerator Information : Dwell Temperature : 1800 °F Dwell Time : 1.00 seconds Incinerator Afterburner Temperature : °F		
11. Emissions Unit Comment : Shares stack and turbine with Unit 1. Generator nameplate rating is for shared turbine (i.e., combined steam outputs for MWC units 1 and 2).		

Emissions Unit Information Section 3

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Mass Burn Incinerator Unit 3		
2. ARMS Identification Number : 03		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? N	5. Emissions Unit Major Group SIC Code : 49
6. Initial Startup Date : 01-Aug-1986		
7. Long-term Reserve Shutdown Date :		
8. Package Unit : Manufacturer : Riley Stoker Model Number : 84005		
9. Generator Nameplate Rating : 25 MW		
10. Incinerator Information : Dwell Temperature : 1800 °F Dwell Time : 1.00 seconds Incinerator Afterburner Temperature : °F		
11. Emissions Unit Comment :		

Emissions Unit Information Section 4

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Hydrated Lime Storage Silo - RRF Water Softening Area		
2. ARMS Identification Number : 04		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? N	5. Emissions Unit Major Group SIC Code : 49
6. Initial Startup Date : 15-Feb-1995		
7. Long-term Reserve Shutdown Date :		
8. Package Unit : Manufacturer : Chemco lime system/Siloair Dust Filter Model Number : Siloair VS20KS3		
9. Generator Nameplate Rating : MW		
10. Incinerator Information : Dwell Temperature : °F Dwell Time : seconds Incinerator Afterburner Temperature : °F		
11. Emissions Unit Comment :		

Emissions Unit Information Section 5

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Engine Generator - Mulching Area		
2. ARMS Identification Number : No Id		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? N	5. Emissions Unit Major Group SIC Code : 49
6. Initial Startup Date : 01-Nov-1993		
7. Long-term Reserve Shutdown Date :		
8. Package Unit : Manufacturer : John Deere Model Number : 4045TF001		
9. Generator Nameplate Rating : 0 MW		
10. Incinerator Information : Dwell Temperature : °F Dwell Time : seconds Incinerator Afterburner Temperature : °F		
11. Emissions Unit Comment : Pinellas County is requesting that this initial Title V operating permit application be processed as a construction permit application for this minor source (emissions less than 20 tons/year for all criteria pollutants).		

Emissions Unit Information Section 6

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Cyclone/wet scrubber for metals recovery system		
2. ARMS Identification Number : No Id		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? N	5. Emissions Unit Major Group SIC Code : 49
6. Initial Startup Date : 01-Nov-1989		
7. Long-term Reserve Shutdown Date :		
8. Package Unit : Manufacturer : Newell Industries, Inc. Model Number : 80104 Dry Ash System		
9. Generator Nameplate Rating : MW		
10. Incinerator Information : Dwell Temperature : °F Dwell Time : seconds Incinerator Afterburner Temperature : °F		
11. Emissions Unit Comment : The cyclone/wet scrubber is used to reduce fugitive ash emissions from the metal recovery system, which is owned and operated by Resource Recycling, LLC. This source was included in the March 1995 construction permit application for EG improvements, for which a permit amendment was signed 10/11/95 by the Department. The applicant requests that this Title V application be processed as the initial operating permit application for this minor PM source.		

Emissions Unit Information Section 1

Emissions Unit Control Equipment 1

1. Description : Electrostatic Precipitator
2. Control Device or Method Code : 10

Emissions Unit Information Section 2

Emissions Unit Control Equipment 1

1. Description : Electrostatic Precipitator
2. Control Device or Method Code : 10

Emissions Unit Information Section 3

Emissions Unit Control Equipment 1

1. Description : Electrostatic Precipitator
2. Control Device or Method Code : 10

Emissions Unit Information Section 4

Emissions Unit Control Equipment 1

1. Description : Dust Control Equipment SILOAIR Dust Filter - Model VS20KS3
2. Control Device or Method Code : 101

Emissions Unit Information Section 6

Emissions Unit Control Equipment 1

1. Description : Cyclone
2. Control Device or Method Code : 75

Emissions Unit Information Section 6

Emissions Unit Control Equipment 2

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

Emissions Unit Information Section 1

Mass Burn Incinerator Unit 1

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	458 mmBtu/hr
2. Maximum Incinerator Rate :	87500.00 lb/hr 1050.00 tons/day
3. Maximum Process or Throughput Rate :	Units :
4. Maximum Production Rate :	Units :
5. Operating Capacity Comment :	Maximum incineration rate specified by PPSA Condition XIV.A.1.

Emissions Unit Information Section 2

Mass Burn Incinerator Unit 2

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	458 mmBtu/hr
2. Maximum Incinerator Rate :	87500.00 lb/hr 1050.00 tons/day
3. Maximum Process or Throughput Rate :	Units :
4. Maximum Production Rate :	Units :
5. Operating Capacity Comment :	Maximum incineration rate specified by PPSA Condition XIV.A.1.

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	458 mmBtu/hr
2. Maximum Incinerator Rate :	87500.00 lb/hr 1050.00 tons/day
3. Maximum Process or Throughput Rate :	Units :
4. Maximum Production Rate :	Units :
5. Operating Capacity Comment :	Maximum incineration rate specified by PPSA Condition XIV.A.1.

Emissions Unit Information Section 4

Hydrated Lime Storage Silo - RRF Water Softening Area

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 :	25
Units :	tons/hour
4. Maximum Production Rate :	
Units :	
5. Operating Capacity Comment :	

Maximum throughput rate is silo filling rate to be accomplished in less than one hour (AO52-268853 Specific Condition 7).

Emissions Unit Information Section 5

Engine Generator - Mulching Area

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate : 0.805 mmBtu/hr
2. Maximum Incinerator Rate : lb/hr tons/day
3. Maximum Process or Throughput Rate : Units :
4. Maximum Production Rate : Units :
5. Operating Capacity Comment : Maximum heat input rate calculated from the brake horsepower (bhp) rating for the engine and the AP-42 Section 3.3 factor of 7000 Btu/bhp-hr for diesel engines: 115 bhp x 7000 Btu/bhp-hr x 1E-6 mmBtu/Btu = 0.805 mmBtu/hr.

Emissions Unit Information Section 6

Cyclone/wet scrubber for metals recovery system

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 :	112
Units :	tons/hr of ash
4. Maximum Production Rate :	
Units :	

5. Operating Capacity Comment :

Throughput rate is the process rate of ash from the MWCs by the metal recovery system. The cyclone/wet scrubber is used to reduce fugitive ash emissions from the system.

Emissions Unit Information Section 1

Mass Burn Incinerator Unit 1

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8760 hours/year

Emissions Unit Information Section 2

Mass Burn Incinerator Unit 2

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8760 hours/year

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8760 hours/year

Emissions Unit Information Section 4

Hydrated Lime Storage Silo - RRF Water Softening Area

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8760 hours/year

Emissions Unit Information Section 5

Engine Generator - Mulching Area

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8760 hours/year

Emissions Unit Information Section 6

Cyclone/wet scrubber for metals recovery system

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
24 hours/day	7 days/week
52 weeks/year	8760 hours/year

B. EMISSIONS UNIT REGULATIONS

Emissions Unit Information Section 1

Mass Burn Incinerator Unit 1

Rule Applicability Analysis

Not required for initial Title V permit application.

B. EMISSIONS UNIT REGULATIONS

Emissions Unit Information Section 2

Mass Burn Incinerator Unit 2

Rule Applicability Analysis

Not required for initial Title V permit application.

B. EMISSIONS UNIT REGULATIONS

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Rule Applicability Analysis

Not required for initial Title V permit application.

B. EMISSIONS UNIT REGULATIONS

Emissions Unit Information Section 4

Hydrated Lime Storage Silo - RRF Water Softening Area

Rule Applicability Analysis

Not required for initial Title V permit application.

B. EMISSIONS UNIT REGULATIONS

Emissions Unit Information Section 5

Engine Generator - Mulching Area

Rule Applicability Analysis

see Attachment 1 for rule applicability

B. EMISSIONS UNIT REGULATIONS

Emissions Unit Information Section 6

Cyclone/wet scrubber for metals recovery system

Rule Applicability Analysis

see Attachment 1 for rule applicability

B. EMISSIONS UNIT REGULATIONS

Emissions Unit Information Section 1

Mass Burn Incinerator Unit 1

List of Applicable Regulations

see Attachment 1 for applicable regulations

B. EMISSIONS UNIT REGULATIONS

Emissions Unit Information Section 2

Mass Burn Incinerator Unit 2

List of Applicable Regulations

see Attachment 1 for applicable regulations

B. EMISSIONS UNIT REGULATIONS

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

List of Applicable Regulations

see Attachment 1 for applicable regulations

B. EMISSIONS UNIT REGULATIONS

Emissions Unit Information Section 4

Hydrated Lime Storage Silo - RRF Water Softening Area

List of Applicable Regulations

see Attachment 1 for applicable regulations

B. EMISSIONS UNIT REGULATIONS

Emissions Unit Information Section 5

Engine Generator - Mulching Area

List of Applicable Regulations

see Attachment 1 for applicable regulations

B. EMISSIONS UNIT REGULATIONS

Emissions Unit Information Section 6

Cyclone/wet scrubber for metals recovery system

List of Applicable Regulations

see Attachment 1 for applicable regulations

C. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 1

Mass Burn Incinerator Unit 1

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	STACK (Units 1 & 2)	
2. Emission Point Type Code :	2	
3. Descriptions of Emission Points Comprising this Emissions Unit : Combined Stack for Units 1 and 2		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Mass Burn Incinerator Unit 2		
5. Discharge Type Code :	V	
6. Stack Height :	161	feet
7. Exit Diameter :	10.0	feet
8. Exit Temperature :	540	°F
9. Actual Volumetric Flow Rate :	680000	acfm
10. Percent Water Vapor :	12.80	%
11. Maximum Dry Standard Flow Rate :	313100	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 335.220 North (km) : 3084.060		
14. Emission Point Comment : Stack characteristics (temperature, flowrates, and % water vapor) based on the most recent available annual SO2 compliance stack tests for units 1 and 2 (March 1995). Temperature and % water vapor were calculated as averages for units 1 and 2 while flowrates were totalled for units 1 and 2.		

C. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 2

Mass Burn Incinerator Unit 2

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	STACK (Units 1 & 2)	
2. Emission Point Type Code :	2	
3. Descriptions of Emission Points Comprising this Emissions Unit : Combined Stack for Units 1 and 2		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : Mass Burn Incinerator Unit 1		
5. Discharge Type Code :	V	
6. Stack Height :	161	feet
7. Exit Diameter :	10.0	feet
8. Exit Temperature :	540	°F
9. Actual Volumetric Flow Rate :	680000	acfm
10. Percent Water Vapor :	12.80	%
11. Maximum Dry Standard Flow Rate :	313100	dscfm
12. Nonstack Emission Point Height :		feet

13. Emission Point UTM Coordinates :

Zone : 17 East (km) : 335.220 North (km) : 3084.060

14. Emission Point Comment :

Stack characteristics (temperature, flowrates, and % water vapor) based on the most recent available annual SO2 compliance stack tests for units 1 and 2 (March 1995). Temperature and % water vapor were calculated as averages for units 1 and 2 while flowrates were totalled for units 1 and 2.

C. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	STACK (Unit 3)	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit : Stack for Mass Burn Incinerator Unit 3		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :		
5. Discharge Type Code :	V	
6. Stack Height :	161	feet
7. Exit Diameter :	7.8	feet
8. Exit Temperature :	571	°F
9. Actual Volumetric Flow Rate :	314632	acfm
10. Percent Water Vapor :	16.10	%
11. Maximum Dry Standard Flow Rate :	135043	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 335.220 North (km) : 3084.100		
14. Emission Point Comment : Stack characteristics (temperature, flowrates, and % water vapor) based on the most recent available annual SO2 compliance stack test for unit 3 (March 1995).		

C. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 4

Hydrated Lime Storage Silo - RRF Water Softening Area

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	BAGHOUSE or LSS	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit : Dust Collector used during filling of Hydrated Lime Storage Silo		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :		
5. Discharge Type Code :	P	
6. Stack Height :	60	feet
7. Exit Diameter :	0.6	feet
8. Exit Temperature :	77	°F
9. Actual Volumetric Flow Rate :	1000	acfm
10. Percent Water Vapor :	0.00	%
11. Maximum Dry Standard Flow Rate :	1000	dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 335.290 North (km) : 3084.200		
14. Emission Point Comment :		

C. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 5

Engine Generator - Mulching Area

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	MULCHINGAREA TROMMEL	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit : Engine Generator - Mulching Area		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :		
5. Discharge Type Code :	V	
6. Stack Height :	11	feet
7. Exit Diameter :	0.3	feet
8. Exit Temperature :	860	°F
9. Actual Volumetric Flow Rate :	713	acfm
10. Percent Water Vapor :		%
11. Maximum Dry Standard Flow Rate :		dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 335.200 North (km) : 3083.470		
14. Emission Point Comment : Location is approximate - mulcher is moved periodically to various areas within the landfill complex.		

C. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 6

Cyclone/wet scrubber for metals recovery system

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	ASH SILO	
2. Emission Point Type Code :	1	
3. Descriptions of Emission Points Comprising this Emissions Unit : Cyclone/wet scrubber is used to reduce fugitive ash emissions from the metal recovery system.		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common : N/A		
5. Discharge Type Code :	V	
6. Stack Height :	54	feet
7. Exit Diameter :	0.7	feet
8. Exit Temperature :	77	°F
9. Actual Volumetric Flow Rate :	40000	acfm
10. Percent Water Vapor :		%
11. Maximum Dry Standard Flow Rate :		dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 335.200 North (km) : 3084.150		
14. Emission Point Comment :		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

Mass Burn Incinerator Unit 1

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Muncipal Solid Waste (MSW) Incineration (emissions related to tons of MSW burned).	
2. Source Classification Code (SCC) : 5-01-001-05	
3. SCC Units : Tons Burned (all solid fuels)	
4. Maximum Hourly Rate : 43.75	5. Maximum Annual Rate : 383,250.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : ~~10~~ 10.47	
10. Segment Comment :	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 2

Mass Burn Incinerator Unit 2

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Municipal Solid Waste (MSW) Incineration (emissions related to tons of MSW burned).	
2. Source Classification Code (SCC) : 5-01-001-05	
3. SCC Units : Tons Burned (all solid fuels)	
4. Maximum Hourly Rate : 43.75	5. Maximum Annual Rate : 383,250.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : ~~10~~ 10.47	
10. Segment Comment :	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Muncipal Solid Waste (MSW) Incineration (emissions related to tons of MSW burned).	
2. Source Classification Code (SCC) : 5-01-001-05	
3. SCC Units : Tons Burned (all solid fuels)	
4. Maximum Hourly Rate : 43.75	5. Maximum Annual Rate : 383,250.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : ~~10~~ 10.47	
10. Segment Comment :	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 4

Hydrated Lime Storage Silo - RRF Water Softening Area

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Silo loading - hydrated lime	
2. Source Classification Code (SCC) : 5-01-001-99	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 25.00	5. Maximum Annual Rate :
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment : USEPA Air CHIEF CD-ROM (version 4.0) gives no SCC codes for lime silos (except lime manufacturers) or water softening/treatment plants, so SCC code of primary facility (i.e., MWCs) used.	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 5

Engine Generator - Mulching Area

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Diesel Fuel Operation Only - Fuel Consumption calculated as: 115 bhp x 7000 Btu/bhp-hr x gal/137000 Btu = 5.9 gal/hr	
2. Source Classification Code (SCC) : 2-02-001-07	
3. SCC Units : Thousand Gallons Burned (all liquid fuels)	
4. Maximum Hourly Rate : ~~0.01~~ 0.0059	5. Maximum Annual Rate : 51.68
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 137	
10. Segment Comment :	

D. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 6

Cyclone/wet scrubber for metals recovery system

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Cyclone/wet scrubber used to reduce fugitive ash emissions from the metal recovery system, which processes up to 112 tons per hour of ash from the MWCs. Emissions are calculated from the grain loading and exhaust flow rate.	
2. Source Classification Code (SCC) : 5-01-001-99	
3. SCC Units : Tons Processed	
4. Maximum Hourly Rate : 112.00	5. Maximum Annual Rate : 232,960.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment : USEPA Air CHIEF CD-ROM (version 4.0) gives no SCC codes for metal recovery from fly ash, so SCC code of primary facility (i.e., MWCs) used.	

E. POLLUTANT INFORMATION

Emissions Unit Information Section 1

Mass Burn Incinerator Unit 1

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted :	SO2			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	170.00	lb/hour	744.60	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : Units : Reference :				
9. Emissions Method Code :				
10. Calculations of Emissions :				
11. Pollutant Potential/Estimated Emissions Comment : PPSA Condition XIV.A.1				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 1

Mass Burn Incinerator Unit 1

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted :	PM			
2. Total Percent Efficiency of Control :	99.00	%		
3. Primary Control Device Code :	010			
4. Secondary Control Device Code :				
5. Potential Emissions :	95.70	lb/hour	419.20	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor :	0.08			
Units :	gr/dscf@12%CO2			
Reference :	PPSA Cond XIV.A.1			
9. Emissions Method Code :	1			

10. Calculations of Emissions :

0.08 gr/dscf@12% CO2 x 139493 dscfm@12%CO2 x lb/7000 gr x 60 min/hr = 95.7 lb/hr

11. Pollutant Potential/Estimated Emissions Comment :

PPSA Condition XIV.A.1 (0.08 gr/dscf@12%CO2) times the maximum flowrate measured during 1988-1995 stack tests for any of the three MWC units.

E. POLLUTANT INFORMATION

Emissions Unit Information Section 1

Mass Burn Incinerator Unit 1

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted :	CO			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	66.00	lb/hour	289.10	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : Units : Reference :				
9. Emissions Method Code :				
10. Calculations of Emissions :				
11. Pollutant Potential/Estimated Emissions Comment : No CO emission limitation for MWC Unit 1; CO potential emissions based on emission limitation for MWC Unit 3.				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 1

Mass Burn Incinerator Unit 1

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted :	NOX			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	254.00	lb/hour	1,112.50	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor :				
Units :				
Reference :				
9. Emissions Method Code :				
10. Calculations of Emissions :				
11. Pollutant Potential/Estimated Emissions Comment :				

No NOx emission limitation for MWC Unit 1; NOx potential emissions based on emission limitation for MWC Unit 3.

E. POLLUTANT INFORMATION

Emissions Unit Information Section 1

Mass Burn Incinerator Unit 1

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted :	PB			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	4.40	lb/hour	19.30	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : Units : Reference :				
9. Emissions Method Code :				
10. Calculations of Emissions :				
11. Pollutant Potential/Estimated Emissions Comment : No Pb emission limitation for MWC Unit 1; Pb potential emissions based on emission limitation for MWC Unit 3.				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 1

Mass Burn Incinerator Unit 1

Pollutant Potential/Estimated Emissions : Pollutant 6

1. Pollutant Emitted :	VOC			
2. Total Percent Efficiency of Control :		%		
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	4.38	lb/hour	19.18	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor :	0.10			
Units :	lb/ton of MSW			
Reference :	AP42/4thEd/SupC			
9. Emissions Method Code :	3			

10. Calculations of Emissions :

0.1 lb/ton x 1050 tons/day x day/24 hrs = 4.38 lb/hr

11. Pollutant Potential/Estimated Emissions Comment :

No VOC emission limitation for MWC Unit 1; VOC potential emissions calculated from AP-42/4th Edition/Supplement C (later versions have no VOC emission factors).

E. POLLUTANT INFORMATION

Emissions Unit Information Section 2

Mass Burn Incinerator Unit 2

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted :	SO2			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	170.00	lb/hour	744.60	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : Units : Reference :				
9. Emissions Method Code :				
10. Calculations of Emissions :				
11. Pollutant Potential/Estimated Emissions Comment : PPSA Condition XIV.A.1				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 2

Mass Burn Incinerator Unit 2

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted :	PM			
2. Total Percent Efficiency of Control :	99.00	%		
3. Primary Control Device Code :	010			
4. Secondary Control Device Code :				
5. Potential Emissions :	95.70	lb/hour	419.20	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor :	0.08			
Units :	gr/dscf@12%CO2			
Reference :	PPSA Cond XIV.A.1			
9. Emissions Method Code :	1			

10. Calculations of Emissions :

0.08 gr/dscf@12% CO2 x 139493 dscfm@12%CO2 x lb/7000 gr x 60 min/hr = 95.7 lb/hr

11. Pollutant Potential/Estimated Emissions Comment :

PPSA Condition XIV.A.1 (0.08 gr/dscf) times the maximum flowrate measured during 1988-1995 stack tests for any of the three MWC units.

E. POLLUTANT INFORMATION

Emissions Unit Information Section 2

Mass Burn Incinerator Unit 2

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted :	CO			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	66.00	lb/hour	289.10	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : Units : Reference :				
9. Emissions Method Code :				
10. Calculations of Emissions :				
11. Pollutant Potential/Estimated Emissions Comment : No CO emission limitation for MWC Unit 2; CO potential emissions based on emission limitation for MWC Unit 3.				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 2

Mass Burn Incinerator Unit 2

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted :	NOX			
2. Total Percent Efficiency of Control :		%		
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	254.00	lb/hour	1,112.50	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : Units : Reference :				
9. Emissions Method Code :				
10. Calculations of Emissions :				
11. Pollutant Potential/Estimated Emissions Comment :				

No NOx emission limitation for MWC Unit 2; NOx potential emissions based on emission limitation for MWC Unit 3.

E. POLLUTANT INFORMATION

Emissions Unit Information Section 2

Mass Burn Incinerator Unit 2

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted :	PB			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	4.40	lb/hour	19.30	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : Units : Reference :				
9. Emissions Method Code :				
10. Calculations of Emissions :				
11. Pollutant Potential/Estimated Emissions Comment : No Pb emission limitation for MWC Unit 2; Pb potential emissions based on emission limitation for MWC Unit 3.				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 2

Mass Burn Incinerator Unit 2

Pollutant Potential/Estimated Emissions : Pollutant 6

1. Pollutant Emitted :	VOC			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	4.38	lb/hour	19.18	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor :	0.10			
Units :	lb/ton MSW			
Reference :	AP42/4thEd/SupC			
9. Emissions Method Code :	3			

10. Calculations of Emissions :

0.1 lb/ton x 1050 tons/day x day/24 hrs = 4.38 lb/hr

11. Pollutant Potential/Estimated Emissions Comment :

No VOC emission limitation for MWC Unit 2; VOC potential emissions based on AP-42/4th Edition/Supplement C (later versions have no VOC emission factors).

E. POLLUTANT INFORMATION

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted :	SO2			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	170.00	lb/hour	744.60	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : Units : Reference :				
9. Emissions Method Code :				
10. Calculations of Emissions :				
11. Pollutant Potential/Estimated Emissions Comment : PPSA Condition XIV.A.1				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted :	PM			
2. Total Percent Efficiency of Control :	99.00	%		
3. Primary Control Device Code :	010			
4. Secondary Control Device Code :				
5. Potential Emissions :	35.90	lb/hour	157.20	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor :	0.03			
Units :	gr/dscf@12%CO2			
Reference :	PPSA Cond XIV.A.1			
9. Emissions Method Code :	1			

10. Calculations of Emissions :

0.03 gr/dscf@12%CO2 x 139493 dscfm@12%CO2 x lb/7000 gr x 60 min/hr = 35.9 lb/hr

11. Pollutant Potential/Estimated Emissions Comment :

PPSA Condition XIV.A.1 (0.03 gr/dscf) times the maximum flowrate measured during 1988-1995 stack tests for any of the three MWC units.

E. POLLUTANT INFORMATION

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted :	NOX			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	254.00	lb/hour	1,112.50	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : Units : Reference :				
9. Emissions Method Code :				
10. Calculations of Emissions :				
11. Pollutant Potential/Estimated Emissions Comment : PPSA Condition XIV.A.1				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted :	CO			
2. Total Percent Efficiency of Control :		%		
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	66.00	lb/hour	289.10	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : Units : Reference :				
9. Emissions Method Code :				
10. Calculations of Emissions :				
11. Pollutant Potential/Estimated Emissions Comment : PPSA Condition XIV.A.1				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted :	PB			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	4.40	lb/hour	19.30	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : Units : Reference :				
9. Emissions Method Code :				
10. Calculations of Emissions :				
11. Pollutant Potential/Estimated Emissions Comment : PPSA Condition XIV.A.1				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Pollutant Potential/Estimated Emissions : Pollutant 6

1. Pollutant Emitted :	H114			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	0.29	lb/hour	1.29	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : Units : Reference :				
9. Emissions Method Code :				
10. Calculations of Emissions :				
11. Pollutant Potential/Estimated Emissions Comment : PPSA Condition XIV.A.1 for mercury limit of 3200 grams/day for MWC unit 3 when more than 2205 lb/day of municipal sludge is fired.				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Pollutant Potential/Estimated Emissions : Pollutant 7

1. Pollutant Emitted :	VOC			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	4.38	lb/hour	19.18	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor :	0.10			
Units :	lb/ton MSW			
Reference :	AP42/4thEd/SupC			
9. Emissions Method Code :	3			

10. Calculations of Emissions :

0.1 lb/ton x 1050 tons/day x day/24 hrs = 4.38 lb/hr

11. Pollutant Potential/Estimated Emissions Comment :

No VOC emission limitation for MWC Unit 3; VOC potential emissions based on AP-42/4th Edition/Supplement C (later versions have no VOC emission factors).

E. POLLUTANT INFORMATION

Emissions Unit Information Section 4

Hydrated Lime Storage Silo - RRF Water Softening Area

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted :	PM			
2. Total Percent Efficiency of Control :	99.00	%		
3. Primary Control Device Code :	101			
4. Secondary Control Device Code :				
5. Potential Emissions :	4.90	lb/hour	14.90	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : Units : Reference :				
9. Emissions Method Code :				
10. Calculations of Emissions :				
11. Pollutant Potential/Estimated Emissions Comment : AO52-268853 Specific Condition 3.				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 5

Engine Generator - Mulching Area

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted :	CO			
2. Total Percent Efficiency of Control :		%		
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	0.77	lb/hour	3.36	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : ~~0.01~~ 6.68E-3 Units : lb/bhp-hr Reference : Tbl 3.3-2/AP42/5thEd				
9. Emissions Method Code :	3			
10. Calculations of Emissions : 115 bhp x 6.68E-3 lb/bhp-hr = 0.768 lb/hr				
11. Pollutant Potential/Estimated Emissions Comment :				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 5

Engine Generator - Mulching Area

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted :	NOX			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	3.57	lb/hour	15.61	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : ~~0.03~~ 0.031 Units : lb/bhp-hr Reference : Tbl 3.3-2/AP42/5thEd				
9. Emissions Method Code :	3			
10. Calculations of Emissions : 115 bhp x 0.031 lb/bhp-hr = 3.565 lb/hr				
11. Pollutant Potential/Estimated Emissions Comment :				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 5

Engine Generator - Mulching Area

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted :	PM10			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	0.25	lb/hour	1.11	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : ~~0.00~~ 2.20E-3 Units : lb/bhp-hr Reference : Tbl 3.3-2/AP42/5thEd				
9. Emissions Method Code :	3			
10. Calculations of Emissions : 115 bhp x 2.20E-3 lb/bhp-hr = 0.253 lb/hr				
11. Pollutant Potential/Estimated Emissions Comment :				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 5

Engine Generator - Mulching Area

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted :	SO2			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	0.24	lb/hour	1.03	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : ~~0.00~~ 2.05E-3 Units : lb/bhp-hr Reference : Tbl 3.3-2/AP42/5thEd				
9. Emissions Method Code : 3				
10. Calculations of Emissions : 115 bhp x 2.05E-3 lb/bhp-hr = 0.236 lb/hr				
11. Pollutant Potential/Estimated Emissions Comment :				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 5

Engine Generator - Mulching Area

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted :	VOC			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	0.29	lb/hour	1.27	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor :	~~0.00~~ 2.51E-3			
Units :	lb/bhp-hr			
Reference :	Tbl 3.3-2/AP42/5thEd			
9. Emissions Method Code :	3			

10. Calculations of Emissions :

115 bhp x 2.51E-3 lb/bhp-hr = 0.289 lb/hr

11. Pollutant Potential/Estimated Emissions Comment :

AP-42 TOC emission factor used to calculate VOC emissions.

E. POLLUTANT INFORMATION

Emissions Unit Information Section 6

Cyclone/wet scrubber for metals recovery system

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted :	PM			
2. Total Percent Efficiency of Control :	99.00	%		
3. Primary Control Device Code :	075			
4. Secondary Control Device Code :	001			
5. Potential Emissions :	3.42	lb/hour	14.98	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor : 0.01 Units : gr/cf Reference : Vendor Data/Estimate				
9. Emissions Method Code :	2			
10. Calculations of Emissions : 0.01 gr/cf x 40,000 cf/min x 60 min/hr x lb/7000 gr = 3.42 lb/hr				
11. Pollutant Potential/Estimated Emissions Comment :				

E. POLLUTANT INFORMATION

Emissions Unit Information Section 1

Mass Burn Incinerator Unit 1

Pollutant Potential/Estimated Emissions : Pollutant 7

1. Pollutant Emitted :	HCL			
2. Total Percent Efficiency of Control :		%		
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	280.00	lb/hour	1,226.40	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor :	6.40			
Units :	lb/ton of MSW			
Reference :	AP42/5thEd			
9. Emissions Method Code :	3			

10. Calculations of Emissions :

6.40 lb/ton x 1050 tons/day x day/24 hrs = 280.0 lb/hr

11. Pollutant Potential/Estimated Emissions Comment :

No HCl emission limitation for MWC Unit 1; potential HCl emissions reported since facility emissions of this HAP exceed 10 tons/year.

E. POLLUTANT INFORMATION

Emissions Unit Information Section 2

Mass Burn Incinerator Unit 2

Pollutant Potential/Estimated Emissions : Pollutant 7

1. Pollutant Emitted :	HCL			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	280.00	lb/hour	1,226.40	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor :	6.40			
Units :	lb/ton of MSW			
Reference :	AP42/5thEd			
9. Emissions Method Code :	3			

10. Calculations of Emissions :

6.40 lb/ton x 1050 tons/day x day/24 hrs = 280.0 lb/hr

11. Pollutant Potential/Estimated Emissions Comment :

No HCl emission limitation for MWC Unit 2; potential HCl emissions reported since facility emissions of this HAP exceed 10 tons/year.

E. POLLUTANT INFORMATION

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Pollutant Potential/Estimated Emissions : Pollutant 8

1. Pollutant Emitted :	HCL			
2. Total Percent Efficiency of Control :	%			
3. Primary Control Device Code :				
4. Secondary Control Device Code :				
5. Potential Emissions :	280.00	lb/hour	1,226.40	tons/year
6. Synthetically Limited?	N			
7. Range of Estimated Fugitive/Other Emissions:			to	tons/year
8. Emissions Factor :	6.40			
Units :	lb/ton of MSW			
Reference :	AP42/5thEd			
9. Emissions Method Code :	3			

10. Calculations of Emissions :

6.40 lb/ton x 1050 tons/day x day/24 hrs = 280.0 lb/hr

11. Pollutant Potential/Estimated Emissions Comment :

No HCl emission limitation for MWC Unit 3; potential HCl emissions reported since facility emissions of this HAP exceed 10 tons/year.

Emissions Unit Information Section 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 :	170.00	lb/hr
4. Equivalent Allowable Emissions :	lb/hour	tons/year
5. Method of Compliance : Annual compliance stack test		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : PPSA Condition XIV.A.1		

Emissions Unit Information Section 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 :	0.08	gr/dscf@12%CO2		
4. Equivalent Allowable Emissions :	95.70	lb/hour	419.20	tons/year
5. Method of Compliance : Annual compliance stack test				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : PPSA Condition XIV.A.1: equivalent allowable emissions based on maximum flowrate measured during 1988-1995 stack tests for any of the three MWC units.				

Emissions Unit Information Section 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 :	170.00	lb/hr
4. Equivalent Allowable Emissions :	lb/hour	tons/year
5. Method of Compliance : Annual compliance stack test		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : PPSA Condition XIV.A.1		

Emissions Unit Information Section 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 :	0.08		gr/dscf@12%CO2	
4. Equivalent Allowable Emissions :	95.70	lb/hour	419.20	tons/year
5. Method of Compliance : Annual compliance stack test				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : PPSA Condition XIV.A.1: equivalent allowable emissions based on maximum flowrate measured during 1988-1995 stack tests for any of the three MWC units.				

Emissions Unit Information Section 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 :	170.00	lb/hr
4. Equivalent Allowable Emissions :	lb/hour	tons/year
5. Method of Compliance : Annual compliance stack test		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : PPSA Condition XIV.A.1		

Emissions Unit Information Section 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 :	0.03		gr/dscf@12%CO2	
4. Equivalent Allowable Emissions :	35.90	lb/hour	157.20	tons/year
5. Method of Compliance : Annual compliance stack test				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : PPSA Condition XIV.A.1: equivalent allowable emissions based on maximum flowrate measured during 1988-1995 stack tests for any of the three MWC units.				

Emissions Unit Information Section 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 :	254.00	lb/hr
4. Equivalent Allowable Emissions :	lb/hour	tons/year
5. Method of Compliance : Annual compliance stack test		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : PPSA Condition XIV.A.1		

Emissions Unit Information Section 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 :	66.00	lb/hr
4. Equivalent Allowable Emissions :	lb/hour	tons/year
5. Method of Compliance : Annual compliance stack test		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : PPSA Condition XIV.A.1		

Emissions Unit Information Section 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 :	4.40	lb/hr
4. Equivalent Allowable Emissions :	lb/hour	tons/year
5. Method of Compliance : Annual compliance stack test		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : PPSA Condition XIV.A.1		

Emissions Unit Information Section 4

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 :	5.00 % opacity
4. Equivalent Allowable Emissions :	4.90 lb/hour 14.90 tons/year
5. Method of Compliance :	Initial and annual Method 9 observer tests required by AO52-268853 in lieu of performing particulate stack tests pursuant to FAC 62-297.620(4).
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Allowable emissions established by FDEP in AO52-268853 in order to be exempt from FAC 62-296.700 (PM RACT).

Emissions Unit Information Section 6

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	ESCPSD			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/cf		
4. Equivalent Allowable Emissions :	3.42	lb/hour	14.98	tons/year

5. Method of Compliance :

Annual Method 9 observer tests are requested in lieu of performing particulate stack tests. If possible, the applicant is requesting that the annual tests be performed at the same time as the annual tests for the lime silo.

6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :

Although permit amendment already received for construction of this unit, potential PM emissions shown to be less than NSR significant emission rate for PM10 (15 tpy). Also, although the metal recovery system, which handles ash, is not subject to PM RACT requirements at FAC 62-296.711 by FAC 62-296.700(2)(d), the cyclone/wet scrubber is subject to the RACT limit of 0.03 gr/dscf at FAC 62-296.711(2)(b).

F. VISIBLE EMISSIONS INFORMATION

Emissions Unit Information Section 1

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype : VE
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 : Annual compliance observer tests
5. Visible Emissions Comment : PPSA Condition XIV.A.1 visible emission limitation: "stack opacity shall be no greater than 20% except as provided for during start-up, shutdown, or malfunctions when the provisions of 62-210.700, FAC, shall apply."

F. VISIBLE EMISSIONS INFORMATION

Emissions Unit Information Section 2

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype : VE

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 :

Annual compliance observer test

5. Visible Emissions Comment :

PPSA Condition XIV.A.1 visible emission limitation: "stack opacity shall be no greater than 20% except as provided for during start-up, shutdown, or malfunctions when the provisions of 62-210.700, FAC, shall apply."

F. VISIBLE EMISSIONS INFORMATION

Emissions Unit Information Section 3

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	VE
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 :	
Annual compliance observer test	
5. Visible Emissions Comment :	
PPSA Condition XIV.A.1 visible emission limitation: "stack opacity shall be no greater than 20% except as provided for during start-up, shutdown, or malfunctions when the provisions of 62-210.700, FAC, shall apply."	

F. VISIBLE EMISSIONS INFORMATION

Emissions Unit Information Section 4

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	VE
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
Normal Conditions :	5 %
Exceptional Conditions :	%
Maximum Period of Excess Opacity Allowed :	0 min/hour
4. Method of Compliance :	
Initial Method 9 test required within 30 days after source is placed in operation, which was performed. AO52-268853 also requires annual Method 9 tests within 60 days prior to or on Feb 15th.	
5. Visible Emissions Comment :	
Under Rule 62-297.620(4), FAC, Department established a visible emission limitation not to exceed 5% opacity in lieu of particulate stack test.	

F. VISIBLE EMISSIONS INFORMATION

Emissions Unit Information Section 6

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype : VE

2. Basis for Allowable Opacity : OTHER

3. Requested Allowable Opacity :

Normal Conditions :	5	%
Exceptional Conditions :		%
Maximum Period of Excess Opacity Allowed :	0	min/hour

4. Method of Compliance :

An operating permit requirement for annual Method 9 visible emissions tests requested. If possible, the applicant is requesting that the annual tests be performed at the same time as the annual tests for the lime silo to reduce costs.

5. Visible Emissions Comment :

The applicant is requesting a visible emission limitation not to exceed 5% opacity in lieu of particulate stack tests.

G. CONTINUOUS MONITOR INFORMATION

Emissions Unit Information Section 1

Mass Burn Incinerator Unit 1

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	VE
2. CMS Requirement :	OTHER
3. Monitor Information :	
Manufacturer :	TECO
Model Number :	400B
Serial Number :	31176-240/B40
4. Installation Date :	22-Jan-1991
5. Performance Specification Test Date :	21-Feb-1991

6. Continuous Monitor Comment :

Stack opacity monitor shared for MWC Units 1 and 2 since both exhaust through a common stack and have the same opacity limits. Excess Emission and Monitoring System Performance Reports submitted quarterly.

G. CONTINUOUS MONITOR INFORMATION

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Continuous Monitoring System : Continuous Monitor 1

1. Parameter Code :	VE
2. CMS Requirement :	OTHER
3. Monitor Information :	
Manufacturer :	Lier Siegler
Model Number :	RM 41
Serial Number :	150-23654
4. Installation Date :	30-Nov-1989
5. Performance Specification Test Date :	25-May-1989

6. Continuous Monitor Comment :

Excess Emission and Monitoring System Performance Reports submitted quarterly. Installation Date is for the permanent COM unit. Performance Specification Test Date is the initial test date, which was performed on an interim rental COM unit.

G. CONTINUOUS MONITOR INFORMATION

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Continuous Monitoring System : Continuous Monitor 2

1. Parameter Code : O2
2. CMS Requirement : OTHER
3. Monitor Information : Manufacturer : Servomex Paramagnetic Oxygen Analyzer Model Number : 1420 Serial Number : 01402-701-279
4. Installation Date : 20-Dec-1989
5. Performance Specification Test Date : 12-Mar-1990
6. Continuous Monitor Comment : Monitoring System Performance Reports submitted quarterly.

G. CONTINUOUS MONITOR INFORMATION

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Continuous Monitoring System : Continuous Monitor 3

1. Parameter Code : CO
2. CMS Requirement : OTHER
3. Monitor Information : Manufacturer : TECO Gas Correlation CO Analyzer Model Number : 48 Serial Number : 48-25861-222
4. Installation Date : 20-Dec-1989
5. Performance Specification Test Date : 12-Mar-1990
6. Continuous Monitor Comment : Excess Emission and Monitoring System Performance Reports submitted quarterly based on a 96-hour averaged CO emission limitation of 150 ppm.

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

Emissions Unit Information Section 1

Mass Burn Incinerator 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 :	

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :	0.0000	lb/hour	0.0000	tons/year
NO2 :				tons/year

5. PSD Comment :

Began operation before February 8, 1988 so emissions do not consume NO2 increment.

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

Emissions Unit Information Section 2

Mass Burn Incinerator 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 :	

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :	0.0000	lb/hour	0.0000	tons/year
NO2 :				tons/year

5. PSD Comment :

Began operation before February 8, 1988 so emissions do not consume NO2 increment.

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

Emissions Unit Information Section 3

Mass Burn Incinerator 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 :	

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :	0.0000	lb/hour	0.0000	tons/year
NO2 :				tons/year

5. PSD Comment :

Began operation before Februrary 8, 1988 so emissions do not consume NO2 increment.

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

Emissions Unit Information Section 4

Hydrated Lime Storage Silo - RRF Water Softening Area

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.

[ ] 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.

[X] 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 :	
NO2 :	

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year

5. PSD Comment :

Dust collector vent has particulate emissions only.

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

Emissions Unit Information Section 5

Engine Generator - Mulching Area

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.

[ ] 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.

[X] 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.

[X] 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 :	0.0000	lb/hour	0.0000	tons/year
SO2 :	0.0000	lb/hour	0.0000	tons/year
NO2 :			0.0000	tons/year

5. PSD Comment :

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

Emissions Unit Information Section 6

Cyclone/wet scrubber for metals recovery building.

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.

[ ] 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.

[X] 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 :	
NO2 :	

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :		lb/hour		tons/year
NO2 :				tons/year

5. PSD Comment :

Cyclone/wet scrubber has particulate emissions only.

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 1

Mass Burn Incinerator Unit 1

Supplemental Requirements for All Applications

1. Process Flow Diagram :	11
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	12
4. Description of Stack Sampling Facilities :	13
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 :	NA
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. Enhanced Monitoring Plan :	7

13. Identification of Additional Applicable Requirements :	1
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.)

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 2

Mass Burn Incinerator Unit 2

Supplemental Requirements for All Applications

1. Process Flow Diagram :	11
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	12
4. Description of Stack Sampling Facilities :	13
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 :	NA
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. Enhanced Monitoring Plan :	7

13. Identification of Additional Applicable Requirements :	1

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.)

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 3

Mass Burn Incinerator Unit 3

Supplemental Requirements for All Applications

1. Process Flow Diagram :	11
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	12
4. Description of Stack Sampling Facilities :	13
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 :	NA
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. Enhanced Monitoring Plan :	7

13. Identification of Additional Applicable Requirements :	1

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.)

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 4

Hydrated Lime Storage Silo - RRF Water Softening Area

Supplemental Requirements for All Applications

1. Process Flow Diagram :	14
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	15
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	16
8. Supplemental Information for Construction Permit Application :	NA
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. Enhanced Monitoring Plan :	7

13. Identification of Additional Applicable Requirements :	17

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.)

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 5

Engine Generator - Mulching Area

Supplemental Requirements for All Applications

1. Process Flow Diagram :	NA
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 :	NA
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. Enhanced Monitoring Plan :	NA

13. Identification of Additional Applicable Requirements :	1

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.)

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 6

Cyclone/wet scrubber for metals recovery system

Supplemental Requirements for All Applications

1. Process Flow Diagram :	NA
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	18
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 :	NA
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. Enhanced Monitoring Plan :	7

13. Identification of Additional Applicable Requirements :	1

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.)

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

Facility Applicable Regulations:
Florida Title V "Core List" regulations (dated 3/25/96) applicable to the facility and any other regulations applicable to the facility or specific emission units are given below

40 CFR 82	**Protection of Stratospheric Ozone (Core List)**
FAC 62-4	**Permits (Core List)**
FAC 62-103	**Rules of Administrative Procedure (Core List)**
FAC 62-210	**Stationary Sources-General Requirements (as listed below)**
FAC 62-210.300	Permits Required
FAC 62-210.300(3)(a)5	Exemption for internal combustion engines in boats, aircraft and vehicles used for transportation of passengers or freight (earth moving equipment and solid waste delivery vehicles at resource recovery facility and landfill areas)
FAC 62-210.300(3)(a)16	Exemption for brazing, soldering or welding equipment
FAC 62-210.300(3)(a)20 -(3)(a)21	Exemption for emergency electrical generators, heating units, and general purpose internal combustion engines not subject to Acid Rain Program
FAC 62-210.300(3)(b)	Temporary Exemptions (for sources on page 4)
FAC 62-210.300(5)	Notification of Startup (for sources shutdown > 1 year)
FAC 62-210.300(6)	Emission Unit Reclassification
FAC 62-210.350	Public Notice and Comment
FAC 62-210.350(3)	Additional 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 62-213	**Operating Permits for Major Sources of Air Pollution (Core List)**
FAC 62-256	**Open Burning and Frost Protection Fires (Core List)**
FAC 62-296	**Stationary Sources-Emission 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 - Mercury Emissions Inventory (Testing Requirements)[a]

[a]Since the facility does not have acid gas control equipment, the mercury emission limits in FAC 62-296.416 "Waste-to-Energy Facilities" do not apply until the facility is upgraded to meet the USEPA Emission Guideline requirements (FAC 62-296.416(3)(a)2).

Facility Applicable Regulations (Concluded):

Exemptions from Regulations for Facility and Specific Emission Units:

FAC 62-296.320(4)(a)	General Particulate Emission Limiting Standards[b]
FAC 62-296.500	RACT - VOC and NO_x Emitting Facilities NOT APPLICABLE[c]
FAC 62-296.600	RACT - Lead NOT APPLICABLE[d]
FAC 62-296.700	RACT - Particulate Matter NOT APPLICABLE to all emission units except cyclone/wet scrubber[e]

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[b]Emission units described in this application are not subject to FAC 62-296.320(4)(a). The MWCs are subject to a particulate emission limit elsewhere in this chapter (FAC 62-296.401(3)(a)) and are also exempted by FAC 62-296.320(4)(a)1.b (i.e. burn refuse). The lime silo, mulching area diesel engine, and metal recovery system (cyclone/wet scrubber) are exempted by FAC 62-296.320(4)(a)1 since they do not process raw materials to produce a finished product through a chemical or physical change.

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

[d]Florida Pb RACT rules at FAC 62-296.600 to .605 could be applicable since the Pinellas County complex is located 25 km from a Pb maintenance area (portion of Hillsborough County as defined at FAC 62-204.304(4)(c)) and therefore located within the "area of influence" (i.e., within 50 km of area boundary). However, there are no Pb RACT requirements in FAC 62-296.601 to .605 applicable to any emissions unit at the complex.

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

MWC Units 1-3: Exempted by undergoing PSD review and receiving BACT determination (all MWC units meet the PM emission requirement of 0.08 gr/dscf pursuant to FAC 62-296.401(3));

Lime Silo: Exempted from PM RACT requirements by Department pursuant to FAC 62-296.700(2)(a) (emissions less than 5 lb/hour and 15 tons/year

(continued...)

MWC Units 1 through 3 Applicable Regulations:

40 CFR 60 Subpart A	New Source Performance Standards-General Provisions
40 CFR 60 Subpart E	Standards of Performance for Incinerators[f]
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 (PM/Odor) for New Incinerators (after 1/18/72) with Charging Rates equal to or greater than 50 tons per day
FAC 62-297.310(1)	Required Number of Tests
FAC 62-297.310(2)	Operating Rate during Testing
FAC 62-297.310(3)	Calculation of Emission Rate
FAC 62-297.310(4)	Applicable Test Procedures
FAC 62-297.310(6)	Required Stack Sampling Facilities
FAC 62-297.310(7)	Frequency of Compliance Tests
FAC 62-297.310(8)	Test Reports

Water Softening Plant Lime Silo Applicable Regulations:

FAC 62-296.320(4)(b)	General Visible Emission Standards
FAC 62-296.700(2)(a)	Department exempted source from PM RACT Requirements
FAC 62-297.310(2)	Operating Rate during Testing
FAC 62-297.310(4)(a)2	Applicable Test Procedures-Opacity Compliance Tests
FAC 62-297.310(7)(a)1	General Compliance Testing (initial opacity test)
FAC 62-297.310(7)(a)4a	General Compliance Testing (annual opacity tests)
FAC 62-297.310(8)	Test Reports
FAC 62-297.401(9)(c)	DEP Method 9
FAC 62-297.620(4)	Department waived test requirements for PM emissions (applicable to minor PM sources equipped with baghouse) and specified an alternative standard of 5% opacity, which is specified in the permit as required by regulation.

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[e](...continued)

so requirements of FAC 62-296.711 Materials Handling...Operations are not strictly applicable);

Mulch Engine: No RACT requirements identified; and

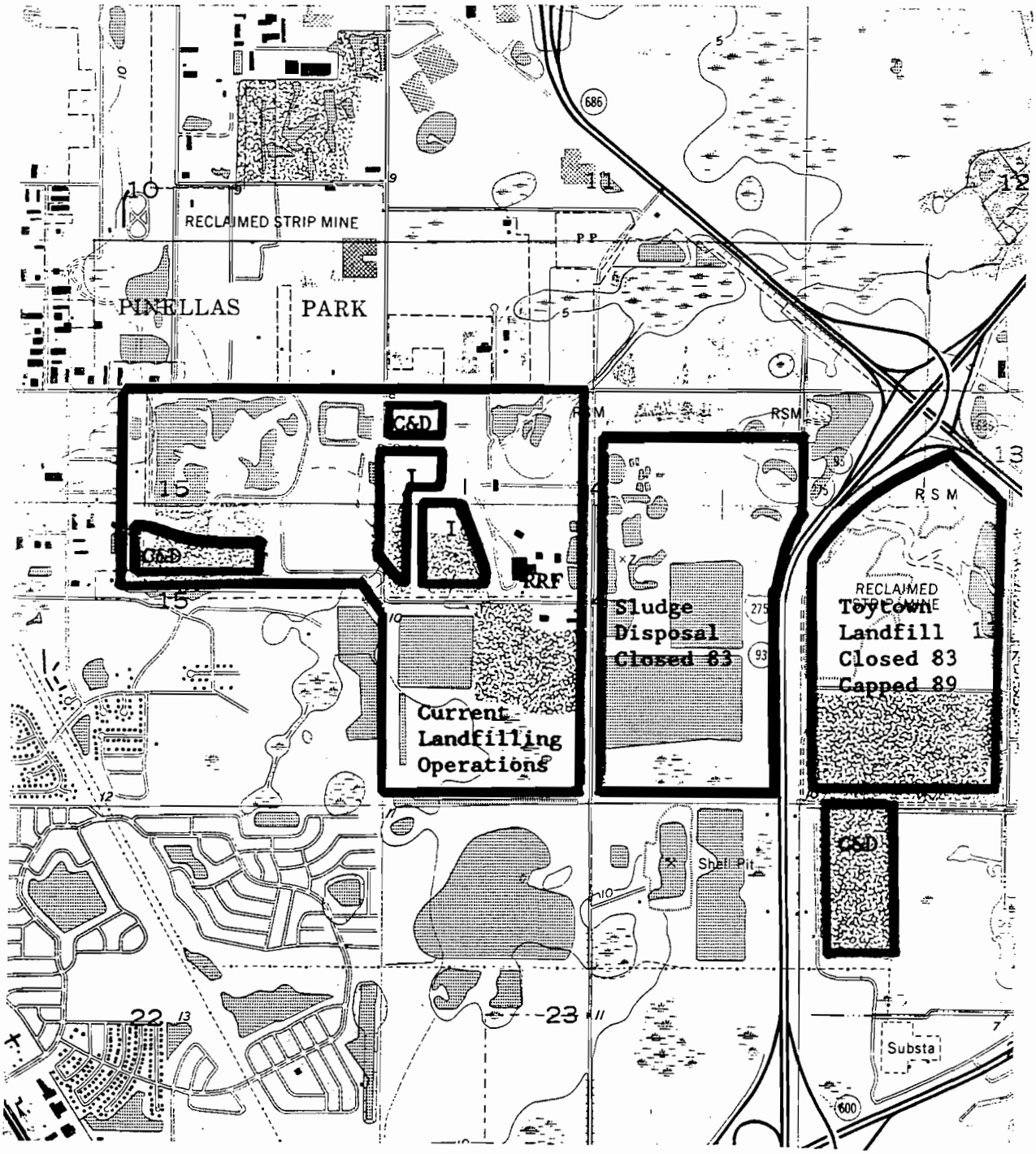
Cyclone/Wet Scrubber: Fugitive ash emissions from the metal recovery system are exempt from PM RACT requirements by FAC 62-296.700(2)(d) as noted earlier in this footnote. Although the metal recovery system, which handles ash, is not subject to the PM RACT requirements of FAC 62-296.711 Materials Handling...Operations, the cyclone/wet scrubber system used to reduce fugitive ash emissions would be subject to the RACT limit of 0.03 gr/dscf given at FAC 62-296.711(2)(b).

[f]40 CFR 60.50a Subpart Ea Standards of Performance for Municipal Waste Combustors do not apply since construction on all three units commenced prior to 12/20/89. Also, 40 CFR 60.30b Subpart Cb Emission Guidelines for Municipal Waste Combustors, which were published in the 12/19/95 Federal Register, will apply in the future when the enabling state regulations are promulgated and the MWC air pollution control equipment are improved.

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

Mulching Area Diesel Engine Rule Applicability:	
FAC 62-210.300(3)(b)	Temporary Exemptions "...an emissions unit that is described in a timely and complete permit application under Chapter 62-213, F.A.C., and not subject to an existing valid air permit, shall be exempt from the permitting requirements of this Chapter, Chapter 62-4, and Rule 62-212.300, F.A.C., until a final determination on a permit application under Chapter 62-213, F.A.C., is made."
FAC 62-212.300	General Preconstruction Review Requirements[8]
Mulching Area Diesel Engine Applicable Regulations:	
FAC 62-210.700	Excess Emissions
FAC 62-296.320(4)(b)	General Visible Emission Standards
Metal Recovery System - Cyclone/Wet Scrubber Rule Applicability:	
FAC 62-210.300(3)(b)	Temporary Exemptions (same as above)
FAC 62-212.300	General Preconstruction Review Requirements[8]
Metal Recovery System - Cyclone/Wet Scrubber Applicable Regulations:	
FAC 62-210.700	Excess Emissions
FAC 62-296.320(4)(b)	General Visible Emission Standards
FAC 62-296.711(2)(b)	see footnote e above for PM RACT discussion

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



Notes:

I = Inactive Class I Landfill Areas
C&D = Inactive Construction & Demolition Landfill Areas
RRF = Pinellas County Resource Recovery Facility

Source: St. Petersburg and Safety Harbor 7½' USGS Maps
Scale: 1" = 2000'

PINELLAS COUNTY RESOURCE RECOVERY FACILITY AREA MAP
ATTACHMENT 2

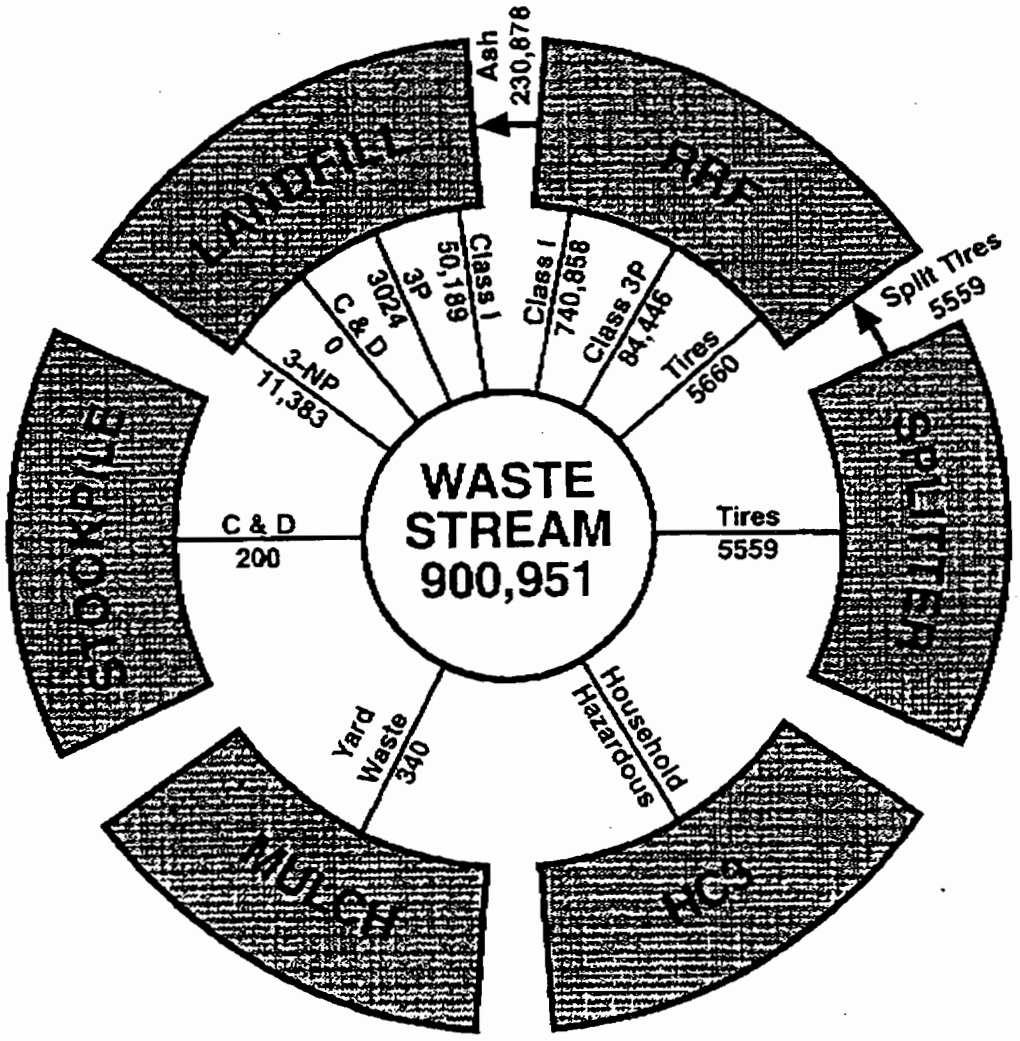
FACILITY PLOT PLANS
PINELLAS COUNTY RESOURCE RECOVERY FACILITY
INITIAL TITLE V PERMIT APPLICATION

Attached to the application are the following facility plot plans:

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

ATTACHMENT 3
FACILITY PLOT PLANS

FACILITY PROCESS FLOW DIAGRAMS
PINELLAS COUNTY RESOURCE RECOVERY FACILITY
INITIAL TITLE V PERMIT APPLICATION



1993 - 1995 AVERAGE

NOTE: C & D material is presently landfilled at private facilities.

ATTACHMENT 4
FACILITY PROCESS FLOW DIAGRAM

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER
PINELLAS COUNTY RESOURCE RECOVERY FACILITY
INITIAL TITLE V PERMIT APPLICATION

The Pinellas County Resource Recovery Facility and other solid waste operations will continue to comply with the requirements of FAC 62-296.320(4)(c) which states:

62-296.320(4) General Particulate Emission Limiting Standards.
(c) Unconfined Emissions of Particulate Matter.
1. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions.
2. Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter.
3. Reasonable precautions include the following:
    a. Paving and maintenance of roads, parking areas and yards.
    b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
    c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
    d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
    e. Landscaping or planting of vegetation.
    f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
    g. Confining abrasive blasting where possible.
    h. Enclosure or covering of conveyor systems.
4. In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

Control measures to be taken during construction activities are specified in the PPSA Conditions of Certification at XIII.A.1 through 7. Control measures for facility operation will comply with appropriate measures specified in FAC 62-296.320(4)(c) above. Specific precautions which are taken in each of the complex areas are given on the next page.

RESOURCE RECOVERY FACILITY AREA

(1) Paving and maintenance of roads and parking areas.
(2) Employment of proper dust-control techniques to prevent fugitive dust emissions during construction activities such as demolition of buildings, grading roads, construction, and land clearing (construction to be experienced during facility improvements to air pollution control equipment to meet the Emission Guideline requirements of 40 CFR 60 Subpart Cb).
(3) Periodic washing of roads and other paved areas to remove particulate matter and to prevent reentrainment, and from buildings or work areas, to prevent particulate from becoming airborne.
(4) Landscaping or planting of vegetation.
(5) Wetting of bottom ash and flyash prior to conveyor systems.

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

(1) Operation of the landfill in accordance with all applicable portions of FAC 62-7.
(2) Putrescible wastes receive a daily cover of a six inch layer of compacted earth or other approved material at the end of each day to prevent odors.
(3) Landscaping or planting of vegetation.
(4) Sweeping of roads and periodic washing of roads.
(5) Covering transport vehicles for ash and metals.
(6) Keeping metal stockpiles damp.

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

RESOURCE RECOVERY FACILITY AREA

(1) Two 500 gallon Diesel Oil Storage Tank
(2) Emergency Diesel Fire Pump[a]
(3) 100 gallon Diesel Oil Storage Tank
(4) 100 gallon Hydraulic Oil Storage Tank
(5) Two 2000 gallon Turbine Oil Storage Tanks
(6) One 2000 gallon Turbine Oil Collection Tank
(7) Welding Station Vent in Maintenance Building
(8) Conditioned Ash Storage Silo
(9) Halon Fire Systems
(10) 500 gallon unleaded Gas Tank
(11) 500 gallon Waste Oil Storage Tank
(12) 7800 gallon Phosphoric Acid Tank
(13) 6000 gallon Caustic Tank
(14) 3900 gallon Sulfuric Acid Tank
(15) Two 6000 gallon Sulfuric Acid Tanks
(16) 6000 gallon Sodium Carbonate Tank

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

(1) Emergency Diesel Generator at Chlorine Treatment Area[a]
(2) Emergency Diesel Generator at Lift Station[a]
(3) Emergency Diesel Generator at Scale Station[a]
(4) Gasoline Generator at Mosquito Control Area[b]
(5) Two 1000 gallon Pesticide Storage Tanks

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[a]Operation of the emergency generators meets the conditions of FAC 62-210(3)(a)(20) for full exemption from permitting requirements (i.e., none of the emergency generators subject to the Federal Acid Rain Program and total fuel consumption by all emergency generators less than 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels used).

[b]Operation of general purpose internal combustion engines and heating units meets the conditions of FAC 62-210(3)(a)(21) for full exemption from permitting requirements (i.e., none of the general purpose engines or heating units subject to the Federal Acid Rain Program and total fuel consumption by all general purpose engines and heating units less than 32,000 gallons per year of diesel fuel, 4,000 gallons per year of gasoline, 4.4 million standard cubic feet per year of natural gas or propane, or an equivalent prorated amount if multiple fuels used).

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

The Pinellas County Resource Recovery Facility (PCRRF) will continue to comply with the current air monitoring requirements contained in the PPSA Conditions of Certification. These requirements are:

MWC Units 1/2:	Annual stack/observer testing for opacity, particulate, and SO_2 emissions in accordance with federal and state stack test procedures for determining compliance with permit limits.
MWC Unit 3:	Annual stack/observer testing for opacity, particulate, SO_2, NO_x, CO, and lead (Pb) emissions in accordance with federal and state stack test procedures for determining compliance with permit limits.

In addition to the monitoring requirements required by the permit for determining compliance with emission limits, stack testing for mercury (Hg) emissions was initiated in 1993 in accordance with the Mercury Emissions Inventory Testing requirements of FAC 62-296.416(3)(e) in the Florida mercury regulations (Waste-to-Energy Facilities).[a] Also, continuous opacity monitors are maintained for the common stack for MWC units 1 and 2 and for the MWC unit 3 stack. For unit 3, oxygen and carbon monoxide continuous emission monitors (CEM) are maintained.

Pinellas County, in cooperation with the Department and USEPA Region IV, has performed numerous recent tests of MWC dioxin/furan emissions and will continue periodic MWC dioxin/furan emissions testing. Other emission units with existing monitoring requirements are:

Lime Silo: (Water Softening System)	Initial and annual (with 60 days prior to or on February 15th) Method 9 opacity observer tests required by AO52-268853 (Specific Condition 3) in lieu of performing particulate stack tests pursuant to FAC 62-297.620(4).

Finally, for the cyclone/wet scrubber used to control fugitive ash emissions from the metal recovery system, the applicant has proposed in the application to perform annual Method 9 visible emission tests (at the same time as those performed for the lime silo) in lieu of performing particulate stack tests for this minor PM source.

No additional enhanced monitoring/compliance assured monitoring (CAM) is proposed beyond that already performed.

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[a]It should be noted that FAC 62-296.416 does not currently regulate mercury emissions since the facility presently has no acid gas air pollution control equipment but will be upgrading the air pollution control equipment in the future in accordance with the USEPA Emission Guidelines at 40 CFR Subpart Cb (see 62-296.416(3)(a)2).

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

Compliance Report

The Pinellas County Resource Recovery Facility (PCRRF) performs annual and continuous monitoring for the three Municipal Waste Combustors (MWCs) as required by the PPSA permit and as described in the previous attachment (Attachment 7 to the initial Title V permit application). Quarterly Excess Emission and Monitoring System Performance reports are submitted by the facility operator (Wheelabrator Pinellas, Inc.) based on continuous monitoring data. Annual compliance testing of the MWC units has been performed since at least 1988, reports from which have been submitted to the Southwest District Office in accordance with the Department's rules and permit requirements. Only one MWC unit has ever exceeded any of its permit limits based on annual compliance stack testing over the last eight years (April 1990 compliance tests for SO_2 for unit 1). Therefore, the MWCs are expected to comply with all current permit limits at the present time and in the foreseeable future.

The hydrated lime storage silo for the water treatment system, which was recently installed, has annual visible observer requirements. The lime silo baghouse had no visible emissions during the initial stack test as required by Permit AO52-268853 in accordance with FAC 62-297.620(4). Therefore, continued compliance with emission limits for opacity and PM are expected for this emissions unit.

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

A cyclone/wet scrubber is used at the facility to control fugitive ash emissions from the metal recovery system. This source was included in a construction permit application for the facility improvements to meet the Emission Guidelines (EGs). A permit amendment to the PSD permits for the proposed modifications was signed by the Department on October 11, 1995. The applicant has proposed in the application to perform annual Method 9 visible emission tests (at the same time as those performed for the lime silo) in lieu of performing particulate stack tests for this minor PM source. The applicant requests that this Title V application be processed as the initial operating permit application for this minor PM source and a temporary exemption granted in accordance with FAC 62-210.300(3)(b).

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

Compliance Plan(Schedule)

As noted above, the MWC units are currently in compliance with current permit conditions. Submittal of this permit application initiates permitting requirements for minor and insignificant diesel engines at areas contiguous to the PCRRF and will bring these sources into compliance. Pinellas County will comply with all future informational and other requests for these unpermitted sources.

There are two pending regulatory changes which will affect the PCRRF and contiguous landfilling operations. When the state regulations are revised to include the MWC EGs at 40 CFR 60 Subpart Cb and to appropriately update the mercury requirements given at FAC 62-296.416, Pinellas County will submit compliance plans and schedules for the MWC units which complies with all requirements of the state plan. Similarly, when the state regulations are revised to include the landfill EGs at 40 CFR 60 Subpart Cc, Pinellas County will submit compliance plans and schedules for the active landfill areas which will comply with all requirements of the state plan.

Based on the above information, no compliance plans or schedules are required until the EGs for MWCs and landfills are adopted in the state regulations.

COMPLIANCE STATEMENT
PINELLAS COUNTY RESOURCE RECOVERY FACILITY
INITIAL TITLE V PERMIT APPLICATION

Owner/Authorized Representative or Responsible Official

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

   Name: Michael J. Rudd
   Title: Director, Pinellas Co Dept. of Solid Waste Management

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

   Organization/Firm: Pinellas Co Dept. of Solid Waste Management
   Street Address: 3095 - 114th Avenue North
   City: St. Petersburg State: FL Zip Code: 33716

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:
   Telephone: (813)464-7565 Fax: (813)464-7713

4. Owner/Authorized Representative or Responsible Official Statement:

   I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in the Compliance Report and Plan (Attachment 8 to this permit) are true, accurate, and complete.

Signature _____ Date 6/13/96

* Attach letter of authorization if not currently on file.

VOC EMISSION ESTIMATES FOR PINELLAS COUNTY LANDFILLING OPERATIONS

As noted in the permit application forms, Pinellas County owns a landfill complex adjacent to the Pinellas County Resource Recovery Facility (PCRRF). Since the landfilling operations have the same SIC code, owner, and are contiguous to the PCRRF, emissions from the landfill must be included in the emission estimates for the PCRRF for applicability purposes.

Landfill areas are shown on the figure given as Attachment 2 to the Title V permit application. The active landfill area used primarily since 1983 is south of the PCRRF. There are inactive C&D and Class I (Windisch and Old Wells Bros.) and closed Class I (Toytown) landfill areas that have not been used for over 10 years. No significant VOC emissions from the C&D landfill areas are expected. Since reliable information is not available for the inactive Class I landfill areas (Windisch and Old Wells Bros. inactive since the 1970s) or closed landfill areas (Toytown closed in 1983), these landfill areas were not included in the VOC emission estimates.

At present, there are no state air regulations for landfills. The USEPA recently promulgated Emission Guidelines (EG) and New Source Performance Standards (NSPS) for landfills. Only the present landfilling operations will be subject to EG requirements. The older landfills will not be subject to EG requirements due to their closure dates. When state regulations are enacted which encompass the EG requirements, an application to modify the Title V Operating Permit will be submitted. EG requirements for the landfill are expected initially to be mostly reporting requirements.

The landfill currently accepts both municipal solid waste (MSW) as well as the ash from the PCRRF. Table 1 shows the historic annual tonnage rates of wastes processed at the PCRRF, landfill, and other operations. Most of the Class I waste is sent directly to the PCRRF. About 6% of the Class I waste generated is landfilled, which represents about 75% of the total landfilled materials excluding RRF ash (the remainder being Class III and C&D waste).[a]

Based on 1989-90 studies of Pinellas County Class waste, the percentage of the degradable wastes in the Class I waste stream is about 68%. Assuming that all processible Class III waste is degradable and all non-processible Class III waste is nondegradable, recent (1993-1995) landfilled materials are about 58% degradable if RRF ash were excluded. Table 2 shows estimates of future tonnage activity through the landfill closure date of 2036. Total MSW generation is based on population estimates while tons processed by the PCRRF and

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[a]Class I and Class III wastes refer to the types of solid wastes accepted at Class I and Class III landfills, respectively, as given at 62-701.340, FAC. Namely, Class I waste would be "...general, non-hazardous household, commercial, industrial, and agricultural wastes..." and Class III wastes would be "...yard trash, construction and demolition debris, waste tires, asbestos, carpet, cardboard, paper, glass, plastic, furniture other than appliances..."

ash landfilling rates are based on PCRRF capacity. Other processing, Class III, and C&D rates are calculated as a percentage of total MSW generation rate based on the percentages calculated for the last three years (1993-1995). Class I landfilling rates represent the remainder of the total MSW generated.

The USEPA Landfill Air Emissions Estimation Model (LAEEM) was used to estimate VOC emissions from the current landfill area. LAEEM inputs require annual landfilling rates (in metric tons, called megagrams (Mg)) and model values for time constant (k), methane generation rate (L_o), and NMOC Concentration (NMOC). Based on EG recommendations, model values given in the latest version of AP-42 (i.e., 5th Edition) were used for model values; namely, k=0.04 yr^{-1}, L_o=125 m^3/Mg or 4411 ft^3/Mg, and NMOC=1170ppmv. The NMOC value is for landfills which accept predominately residential waste will little or no commercial/industrial hazardous wastes such as spent solvents.[b] Based on proposed revisions to AP-42, the annual landfilling rate represents a waste stream of which 80% is degradable waste. Therefore, PCRRF ash has been excluded from the landfilling rates. As shown above, about 58% of the remaining waste stream landfilled is degradable wastes. Therefore, as suggested in the AP-42 revisions, the landfilling rate input to the LAEEM as shown on Tables 1 and 2 was adjusted so that 80% the total waste stream is degradable waste.

LAEEM estimates were made for VOC emissions, which are expected to be about 92.3% of the NMOC emission rate (i.e., VOC=1080ppmv). As shown on Table 3, maximum annual VOC emissions occur for the 2036, the year of landfill closure. The maximum annual VOC emission rate for 1996 through 2004 (the last possible year of the initial Title V permit) is 50.3 tons/year. This value is reported in the Title V permit application on the Section II, Part C "Facility Pollutant Information".

[b]Numerous operational practices at the landfill and state and local regulations prevent the disposal of most commercial/industrial hazardous wastes at the landfill.

TABLE 1
PINELLAS COUNTY BRIDGEWATER ACRES LANDFILL - HISTORIC LANDFILLING RATES

	(a)	(b)	(c)	Tons to Landfill							Excluding RRF Ash				
	Total	RRF/All	Other		--Class III--		(d)			Cumulative		(e)	%	(f) LAEEM	Cumulative LAEEM
Year	MSW (tons)	Types (tons)	Process (tons)	Class I	Proc.	NonProc.	C&D	RRF Ash	Total	Total Tons	Total	Degrad	Degrad	Rate(Mg)	Rate(Mg)
1983	622,808	477,106	1,760	50,516	0	82,722	10,704	84,601	228,543	228,543	143,942	34,351	23.9%	38,953	38,953
1984	798,503	542,783	2,102	160,220	0	66,360	27,038	107,009	360,627	589,170	253,618	108,950	43.0%	123,547	162,500
1985	857,803	628,822	2,395	130,324	29,943	47,077	19,242	174,389	400,975	990,145	226,586	118,563	52.3%	134,447	296,947
1986	999,539	752,266	3,164	78,982	97,120	17,017	50,990	224,852	468,961	1,459,106	244,109	150,828	61.8%	171,035	467,982
1987	1,165,564	934,722	675	7,028	47,029	101,065	75,045	269,445	499,612	1,958,718	230,167	51,808	22.5%	58,749	526,731
1988	1,111,187	885,466	0	24,266	64,716	92,389	44,350	202,828	428,549	2,387,267	225,721	81,217	36.0%	92,098	618,829
1989	1,037,842	867,648	160	44,599	50,121	40,226	35,088	203,649	373,683	2,760,950	170,034	80,448	47.3%	91,226	710,055
1990	972,578	843,619	179	36,416	32,744	59,604	16	216,458	345,238	3,106,188	128,780	57,507	44.7%	65,212	775,267
1991	875,372	772,342	1,347	55,128	20,120	26,435	0	206,046	307,729	3,413,917	101,683	57,607	56.7%	65,325	840,592
1992	867,947	824,932	7,055	25,533	1,447	8,980	0	211,436	247,396	3,661,313	35,960	18,809	52.3%	21,329	861,921
1993	923,217	854,220	7,076	46,719	2,841	12,361	0	222,378	284,299	3,945,612	61,921	34,610	55.9%	39,247	901,168
1994	885,647	822,315	6,198	46,357	2,421	8,356	0	235,461	292,595	4,238,207	57,134	33,944	59.4%	38,492	939,660
1995	893,988	813,659	5,595	57,491	3,810	13,433	0	234,796	309,530	4,547,737	74,734	42,904	57.4%	48,652	988,312
Average (1993-95):															
	900,951	830,065	6,290	50,189	3,024	11,383	0	230,878			64,596	37,153	57.5%	46,441	
		92.1%	0.7%	5.6%	0.3%	1.3%	0.0%								

(a) Tons MSW processed by Pinellas County Solid Waste Operations/all types of MSW (does not include landfilled ash).
(b) Tons MSW sent to PCRRF, including Class I, Class III, C&D, and Tires.
(c) Tons MSW sent to other solid waste operations (e.g., Class III to mulching, Tires to Splitter, C&D to Storage Pile).
(d) Includes landfilled tires in total. Since 1990 a private C&D landfill has received nearly all of Pinellas County's C&D waste. Since 1989 tires have been processed at the PCRRF.
(e) Assumes 68% of Class I waste and all of the processible Class III waste is degradable.
(f) Landfill Air Emissions Estimation Model input landfilling rates adjusted so that nondegradable wastes consist of no more than 20% of the total landfilling rate modeled.

TABLE 2
PINELLAS COUNTY BRIDGEWATER ACRES LANDFILL - PROJECTED LANDFILLING RATES

				Tons to Landfill							Excluding RRF Ash				
	Total MSW	RRF/All Types	Other Process		--Class III--					Cumulative		(a)	%	(b) LAEEM	Cumulative LAEEM
Year	(tons)	(tons)	(tons)	Class I	Proc.	NonProc.	C&D	RRF Ash	Total	Total Tons	Total	Degrad	Degrad	Rate(Mg)	Rate(Mg)
1996	916,754	829,868	6,417	72,218	2,750	11,918	0	222,023	308,909	3,373,415	86,886	51,858	59.7%	58,806	1,047,118
1997	925,027	829,868	6,475	80,359	2,775	12,025	0	222,023	317,182	3,690,597	95,159	57,419	60.3%	65,112	1,112,230
1998	933,301	829,868	6,533	88,500	2,800	12,133	0	222,023	325,456	4,016,053	103,433	62,980	60.9%	71,418	1,183,648
1999	941,574	829,868	6,591	96,641	2,825	12,240	0	222,023	333,729	4,349,782	111,706	68,541	61.4%	77,724	1,261,372
2000	949,848	829,868	6,649	104,782	2,850	12,348	0	222,023	342,003	4,691,785	119,980	74,102	61.8%	84,030	1,345,402
2001	958,121	829,868	6,707	112,923	2,874	12,456	0	222,023	350,276	5,042,061	128,253	79,662	62.1%	90,335	1,435,737
2002	966,165	829,868	6,763	120,839	2,898	12,560	0	222,023	358,320	5,400,381	136,297	85,069	62.4%	96,466	1,532,203
2003	974,210	829,868	6,819	128,754	2,923	12,665	0	222,023	366,365	5,766,746	144,342	90,476	62.7%	102,598	1,634,801
2004	982,254	829,868	6,876	136,670	2,947	12,769	0	222,023	374,409	6,141,155	152,386	95,883	62.9%	108,729	1,743,530
2005	990,298	829,868	6,932	144,585	2,971	12,874	0	222,023	382,453	6,523,608	160,430	101,289	63.1%	114,859	1,858,389
2006	998,342	829,868	6,988	152,501	2,995	12,978	0	222,023	390,497	6,914,105	168,474	106,696	63.3%	120,991	1,979,380
2007	1,006,283	829,868	7,044	160,314	3,019	13,082	0	222,023	398,438	7,312,543	176,415	112,033	63.5%	127,043	2,106,423
2008	1,014,223	829,868	7,100	168,127	3,043	13,185	0	222,023	406,378	7,718,921	184,355	117,369	63.7%	133,094	2,239,517
2009	1,022,163	829,868	7,155	175,941	3,066	13,288	0	222,023	414,318	8,133,239	192,295	122,706	63.8%	139,146	2,378,663
2010	1,030,103	829,868	7,211	183,754	3,090	13,391	0	222,023	422,258	8,555,497	200,235	128,043	63.9%	145,198	2,523,861
2011	1,038,043	829,868	7,266	191,566	3,114	13,495	0	222,023	430,198	8,985,695	208,175	133,379	64.1%	151,248	2,675,109
2012	1,045,879	829,868	7,321	199,277	3,138	13,596	0	222,023	438,034	9,423,729	216,011	138,646	64.2%	157,221	2,832,330
2013	1,053,714	829,868	7,376	206,987	3,161	13,698	0	222,023	445,869	9,869,598	223,846	143,912	64.3%	163,193	2,995,523
2014	1,061,550	829,868	7,431	214,697	3,185	13,800	0	222,023	453,705	10,323,303	231,682	149,179	64.4%	169,165	3,164,688
2015	1,069,386	829,868	7,486	222,408	3,208	13,902	0	222,023	461,541	10,784,844	239,518	154,445	64.5%	175,137	3,339,825
2016	1,077,222	829,868	7,541	230,118	3,232	14,004	0	222,023	469,377	11,254,221	247,354	159,712	64.6%	181,109	3,520,934
2017	1,084,829	829,868	7,594	237,604	3,254	14,103	0	222,023	476,984	11,731,205	254,961	164,825	64.6%	186,907	3,707,841
2018	1,092,435	829,868	7,647	245,088	3,277	14,202	0	222,023	484,590	12,215,795	262,567	169,937	64.7%	192,704	3,900,545
2019	1,100,042	829,868	7,700	252,573	3,300	14,301	0	222,023	492,197	12,707,992	270,174	175,050	64.8%	198,502	4,099,047
2020	1,107,649	829,868	7,754	260,059	3,323	14,399	0	222,023	499,804	13,207,796	277,781	180,163	64.9%	204,300	4,303,347

TABLE 2 (Concluded)
PINELLAS COUNTY BRIDGEWATER ACRES LANDFILL - PROJECTED LANDFILLING RATES

				Tons to Landfill						Excluding RRF Ash				
	Total MSW	RRF/All Types	Other Process		--Class III--				Cumulative		(a)	%	(b) LAEEM	Cumulative LAEEM
Year	(tons)	(tons)	(tons)	Class I	Proc.	NonProc.	C&D	RRF Ash	Total	Total Tons	Total	Degrad	Degrad	Rate(Mg)	Rate(Mg)
2021	1,115,255	829,868	7,807	267,543	3,346	14,498	0	222,023	507,410	13,715,206	285,387	185,275	64.9%	210,097	4,513,444
2022	1,122,862	829,868	7,860	275,028	3,369	14,597	0	222,023	515,017	14,230,223	292,994	190,388	65.0%	215,895	4,729,339
2023	1,130,468	829,868	7,913	282,513	3,391	14,696	0	222,023	522,623	14,752,846	300,600	195,500	65.0%	221,692	4,951,031
2024	1,138,075	829,868	7,967	289,998	3,414	14,795	0	222,023	530,230	15,283,076	308,207	200,613	65.1%	227,490	5,178,521
2025	1,145,682	829,868	8,020	297,483	3,437	14,894	0	222,023	537,837	15,820,913	315,814	205,725	65.1%	233,287	5,411,808
2026	1,153,288	829,868	8,073	304,967	3,460	14,993	0	222,023	545,443	16,366,356	323,420	210,838	65.2%	239,085	5,650,893
2027	1,160,895	829,868	8,126	312,452	3,483	15,092	0	222,023	553,050	16,919,406	331,027	215,950	65.2%	244,882	5,895,775
2028	1,168,501	829,868	8,180	319,936	3,506	15,191	0	222,023	560,656	17,480,062	338,633	221,062	65.3%	250,679	6,146,454
2029	1,176,108	829,868	8,233	327,423	3,528	15,289	0	222,023	568,263	18,048,325	346,240	226,176	65.3%	256,478	6,402,932
2030	1,183,715	829,868	8,286	334,908	3,551	15,388	0	222,023	575,870	18,624,195	353,847	231,288	65.4%	262,275	6,665,207
2031	1,191,321	829,868	8,339	342,392	3,574	15,487	0	222,023	583,476	19,207,671	361,453	236,401	65.4%	268,073	6,933,280
2032	1,198,928	829,868	8,392	349,877	3,597	15,586	0	222,023	591,083	19,798,754	369,060	241,513	65.4%	273,870	7,207,150
2033	1,206,535	829,868	8,446	357,362	3,620	15,685	0	222,023	598,690	20,397,444	376,667	246,626	65.5%	279,668	7,486,818
2034	1,214,141	829,868	8,499	364,847	3,642	15,784	0	222,023	606,296	21,003,740	384,273	251,738	65.5%	285,465	7,772,283
2035	1,221,748	829,868	8,552	372,332	3,665	15,883	0	222,023	613,903	21,617,643	391,880	256,851	65.5%	291,263	8,063,546
2036	1,229,354	829,868	8,605	379,816	3,688	15,982	0	222,023	621,509	22,239,152	399,486	261,963	65.6%	297,059	8,360,605

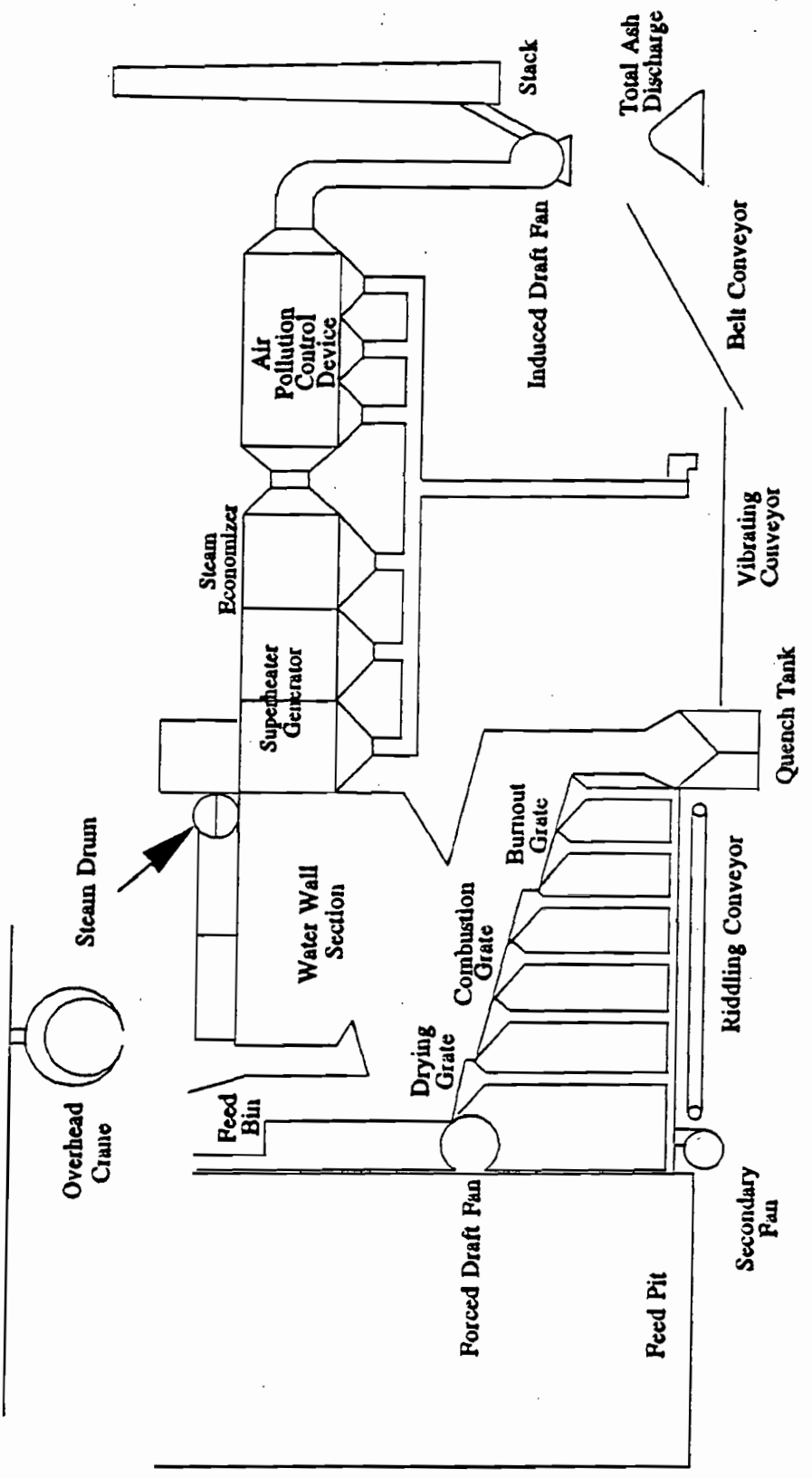
(a) Assumes 68% of Class I waste and all of the processible Class III waste is degradable.
(b) Landfill Air Emissions Estimation Model input landfilling rates adjusted so that nondegradable wastes consist of no more than 20% of the total landfilling rate modeled.

TABLE 3
LAEEM MODEL RESULTS[c]

Year	Cumulative Landfilled (Mg)	-VOC Emission Rate- (Mg/yr)	(Tons/yr)	Year	Cumulative Landfilled (Mg)	-VOC Emission Rat (Mg/yr)	(Tons/yr)
1983	38,950	1.5	1.7	2015	3,340,000	81.2	89.4
1984	162,500	6.2	6.8	2016	3,521,000	85.1	93.7
1985	296,900	11.2	12.3	2017	3,708,000	88.9	97.9
1986	468,000	17.4	19.2	2018	3,901,000	92.9	102.3
1987	526,700	19.0	20.9	2019	4,099,000	97.0	106.9
1988	618,800	21.8	24.0	2020	4,303,000	101.0	111.3
1989	710,100	24.5	27.0	2021	4,513,000	105.2	115.9
1990	775,300	26.0	28.6	2022	4,729,000	109.4	120.5
1991	840,600	27.5	30.3	2023	4,951,000	113.7	125.2
1992	861,900	27.3	30.1	2024	5,179,000	118.1	130.1
1993	901,200	27.7	30.5	2025	5,412,000	122.5	134.9
1994	939,700	28.1	31.0	2026	5,651,000	126.9	139.8
1995	988,300	28.9	31.8	2027	5,896,000	131.4	144.7
1996	1,047,000	30.0	33.0	2028	6,146,000	135.9	149.7
1997	1,112,000	31.4	34.6	2029	6,403,000	140.5	154.8
1998	1,184,000	32.9	36.2	2030	6,665,000	145.2	159.9
1999	1,261,000	34.6	38.1	2031	6,933,000	149.9	165.1
2000	1,345,000	36.5	40.2	2032	7,207,000	154.6	170.3
2001	1,436,000	38.6	42.5	2033	7,487,000	159.3	175.5
2002	1,532,000	40.8	44.9	2034	7,772,000	164.1	180.8
2003	1,635,000	43.2	47.6	2035	8,064,000	169.0	186.2
2004	1,744,000	45.7	50.3	2036	8,361,000	173.8	191.5
2005	1,858,000	48.3	53.2	2037	8,361,000	167.0	184.0
2006	1,979,000	51.1	56.3	2038	8,361,000	160.5	176.8
2007	2,106,000	54.0	59.5	2039	8,361,000	154.2	169.9
2008	2,240,000	57.1	62.9	2040	8,361,000	148.1	163.1
2009	2,379,000	60.2	66.3	2041	8,361,000	142.3	156.8
2010	2,524,000	63.5	69.9	2042	8,361,000	136.7	150.6
2011	2,675,000	66.8	73.6	2043	8,361,000	131.4	144.7
2012	2,832,000	70.3	77.4	2044	8,361,000	126.2	139.0
2013	2,996,000	73.8	81.3	2045	8,361,000	121.3	133.6
2014	3,165,000	77.5	85.4	2046	8,361,000	116.5	128.3

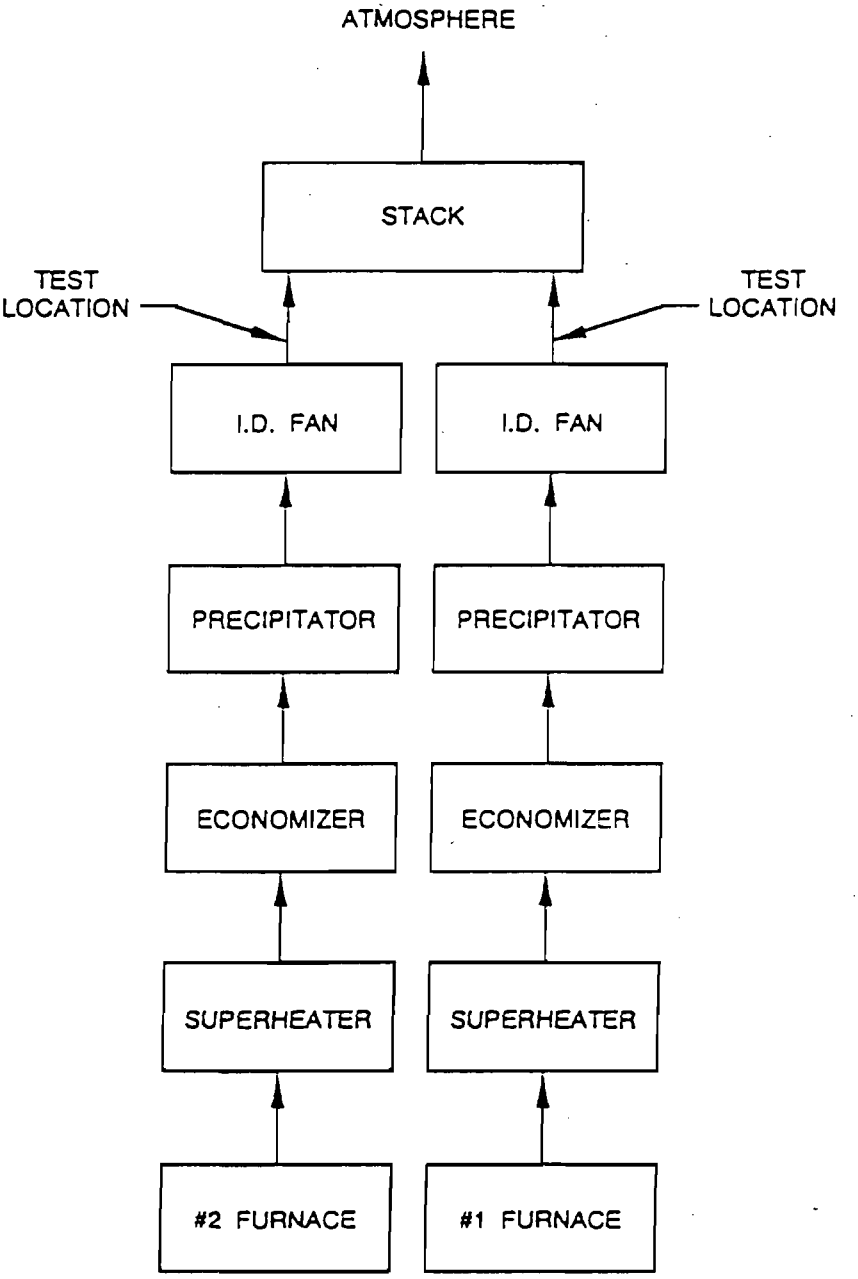
[c]Other than cumulative landfilled weight (Mg), other LAEEM inputs for VOC emissions are time constant k=0.04 yr^{-1}, methane generation rate L_o=4411 ft^3/Mg, and VOC concentration (as hexane) of 1080 ppmv.

DIAGRAM OF TYPICAL MASS BURN WATERWALL COMBUSTOR



Source: AP-42, 5th Edition, Figure 2.1-1

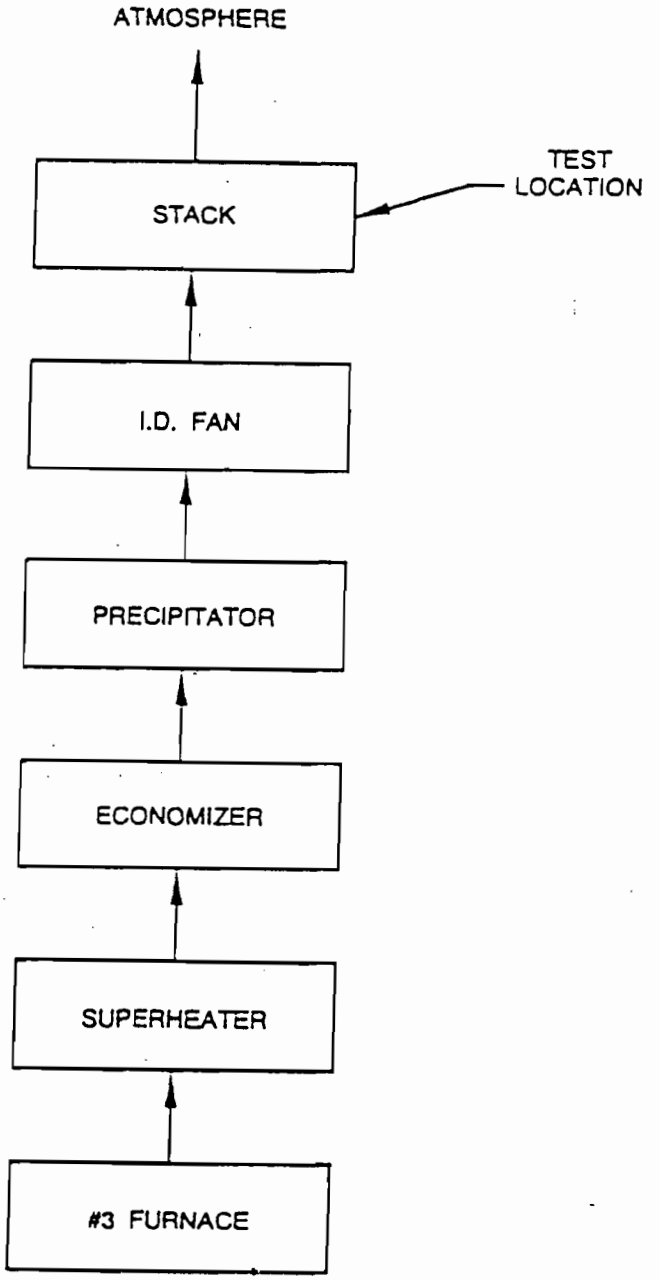
PROCESS FLOW DIAGRAM
AIR FLOW SCHEMATIC FOR MWC UNITS 1 AND 2



UNIT NOS. 1 AND 2 AIR FLOW SCHEMATIC

Source: Entropy, Inc. Stationary Source Sampling Report, Reference No. 13508, March 1995

PROCESS FLOW DIAGRAM
AIR FLOW SCHEMATIC FOR MWC UNIT 3



UNIT NO. 3 AIR FLOW SCHEMATIC

Source: Entropy, Inc. Stationary Source Sampling Report, Reference No. 13508, March 1995

DESCRIPTION OF CONTROL EQUIPMENT FOR MWC UNITS 1 THROUGH 3

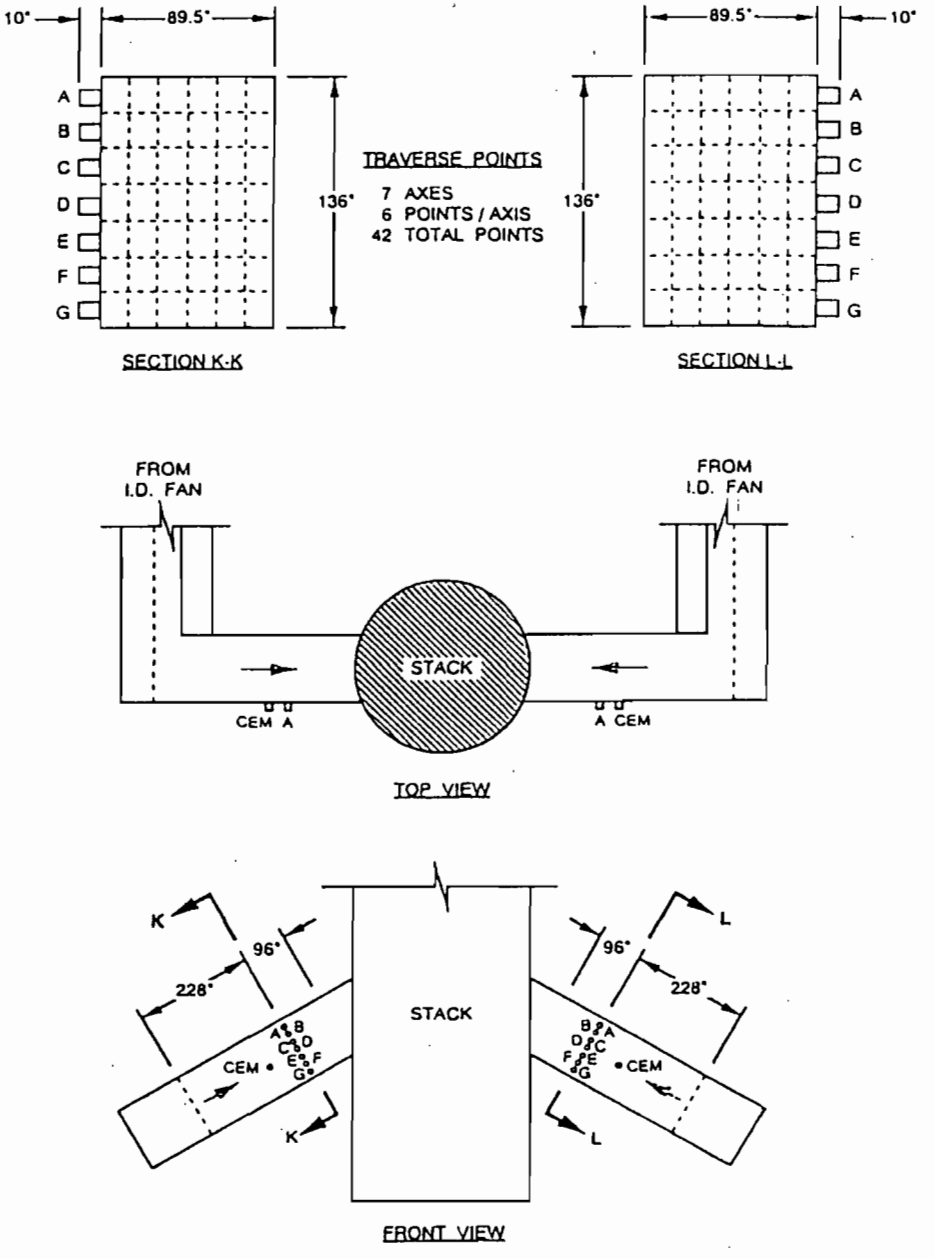
The Pinellas County Resource Recovery Facility (PCRRF) presently utilizes Electrostatic Precipitators (ESPs) for the control of particulate emissions. Each of the three Municipal Waste Combustors (MWCs) is equipped with its own dedicated ESP. The three ESPs are essentially identical. Because of the large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

	MWC Units 1/2	MWC Unit 3
Manufacturer	Air Correction Division of UOP Inc.	Wheelabrator-Fry, Inc.
Model Number	3636-3.28-2 (Spec.Number)	21-2554-18 (Cust.Number)
Serial Number(s)	F-101, F-102	3250
Cleaning Method	Gravity impact rappers	Gravity impact rappers

As noted elsewhere, the ESPs will be replaced in the future with spray dry absorbers/fabric filters based on the requirements of the MWC Emission Guidelines. A permit amendment for these proposed facility improvements was signed on October 11, 1995. When the ESPs are replaced, a modification to the Title V permit will be submitted at that time.

DESCRIPTION OF STACK SAMPLING FACILITIES
MWC UNITS 1 AND 2

Since MWC Units 1 and 2 exhaust through the same stack, sampling locations are located at the ID fan outlets. Normally, each fan outlet cross section is divided into 42 equal areas with six sampling points on each of seven axes. These sampling locations are shown below:

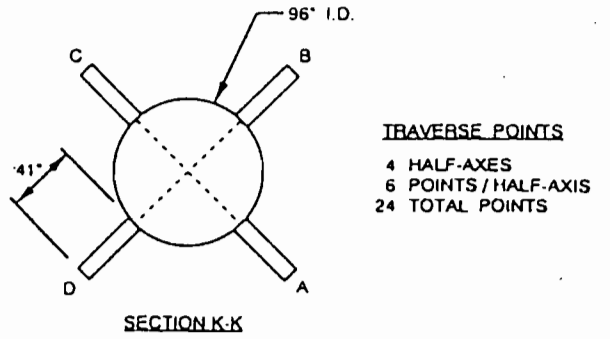


UNIT NOS. 1 AND 2 ID FAN OUTLET TEST LOCATIONS

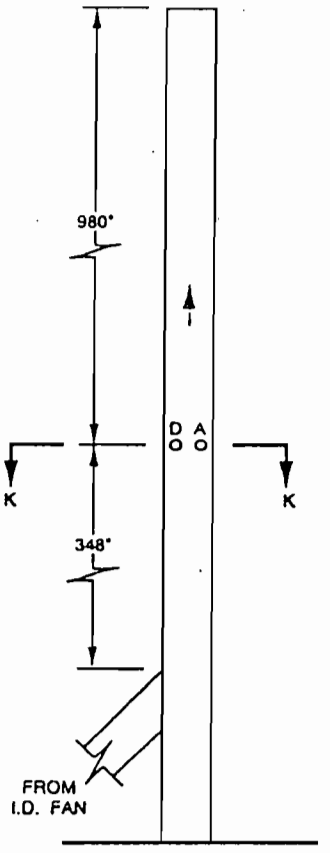
Source: Entropy, Inc. Stationary Source Sampling Report, Reference No. 13508, March 1995

DESCRIPTION OF STACK SAMPLING FACILITIES
MWC UNIT 3

The MWC Unit 3 stack cross section is normally divided into 24 equal areas with six sampling points on each of four half-axes. These sampling locations are shown below:



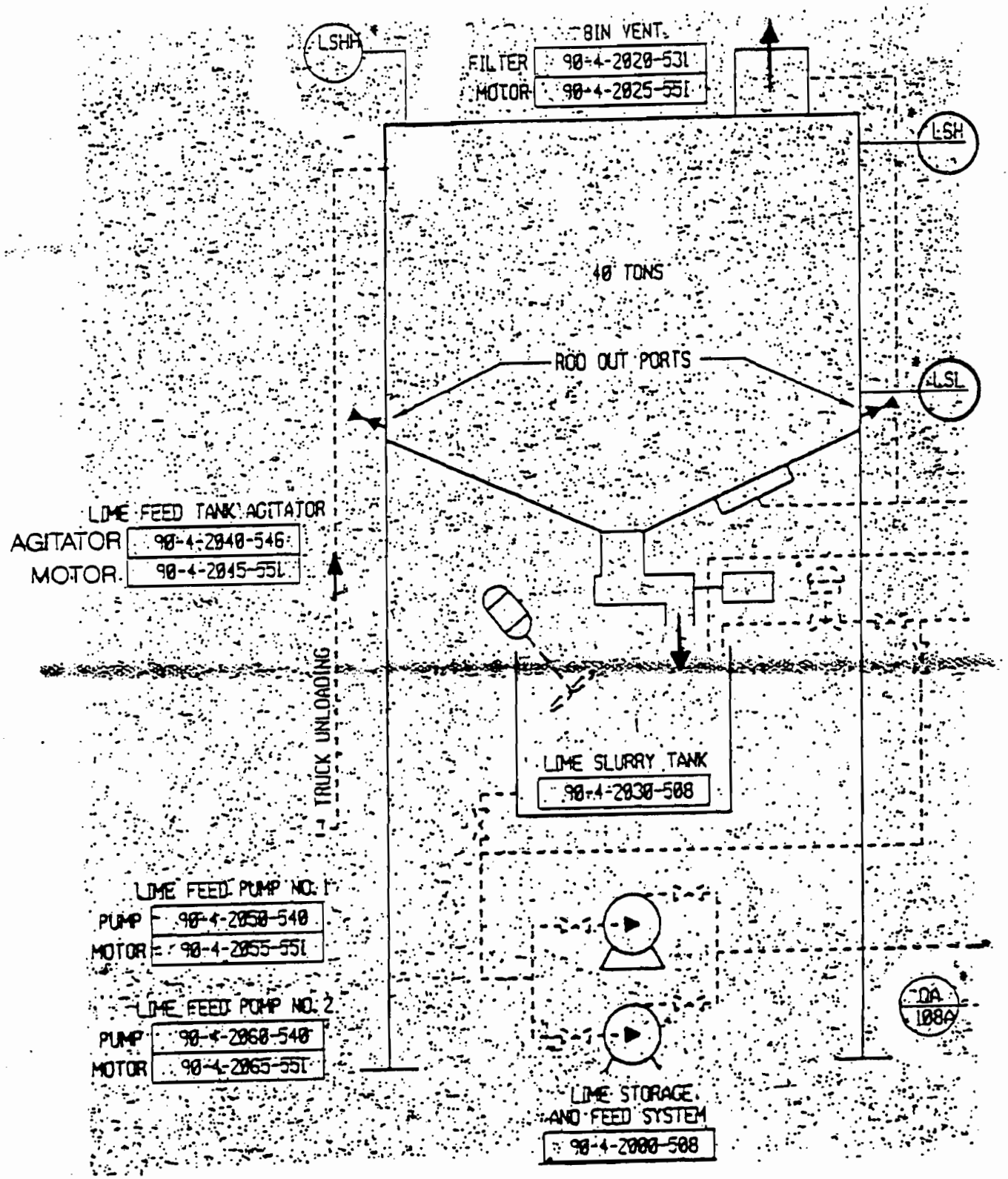
SECTION K-K



UNIT NO. 3 STACK TEST LOCATION

Source: Entropy, Inc. Stationary Source Sampling Report, Reference No. 13508, March 1995

ATTACHMENT 14
PROCESS FLOW DIAGRAM - LIME SILO



HDR ENGINEERING, INC.
TAMPA, FLORIDA

SOLID WASTE DEPARTMENT
LIME SOFTENING SYSTEM
PINELLAS COUNTY FLORIDA

Date: SEPT 94
Sheet: LSS-A

ATTACHMENT 15
DESCRIPTION OF CONTROL EQUIPMENT - LIME SILO
(5 Additional Pages)

RUST/WHEELABRATOR PINELLAS FACILITY
PINELLAS COUNTY, FLORIDA
STORMWATER COLD LIME
SOFTENING SYSTEM

SYSTEM CONTROL DESCRIPTION

The Chemco hydrated lime system is designed to makedown, store, and transfer lime slurry to the clarifier in the water treatment facility. The overall system control description is outlined in the three sub-systems below:

1. **Truck Unloading** - The truck unloading process - consisting of a fill line, storage silo, and silo dust collector - allows a hydrated lime supply truck to pneumatically transfer dry lime to the bulk storage bin. The dust collector on the silo roof permits the transfer air to escape into the atmosphere during the transfer process without lime dust contamination. The dust collector fan (in auto mode) and timer sequencer are energized when the fill line cap is removed and stops after a time delay when the cap is replaced. (Note: The dust collector is also controlled through the air fluidizing system - See description below.) A HI and LO level switch in the silo will provide a visual and audible alarm; one intermediate level switch will be located on the silo and have a light on the panel to indicate re-order level for one full truckload.

   The silo, with approximately 40 tons of usable storage capacity, will hold two full truckloads. If the average required feed rate to the slurry end user is 300 pounds of dry lime per hour assuming 24-hour per day operation, the silo will require a truckload once every 5 days.

   NOTE: Over-pressurizing of the silo could occur during the truck unolading process or during the air fluidizing process. A pressure/vacuum relief vent is provided on the silo roof and factory set to relieve at +7" and -1". If a white dust plume is seen coming out of the vent, all processes should be stopped to determine the cause of the over-pressure.

2. **Slurry Makedown System** - The slurry makedown system removes dry lime from the storage bin at a controlled rate and feeds it into a tank where water is mixed in to create a specified strength of slurry. The makedown system is started and stopped based upon level in the slurry tank — a low level set point starts the system; a hi-level set point stops the system. The list of equipment and the controls for their operation are listed below:

CHEMCO P.O. Box 589 • 105 Commerce Boulevard • Lawrence, PA 15055 • 412-746-4410 • FAX 412-746-4880

Bin vibrator - Two pneumatic impact type vibrators controlled through their air supply solenoid valve start and stop automatically with the lime feeder to aid in discharging dry lime from the discharge cone. It is time controlled in the PLC for intermittent operation during feed cycle and factory preset for 15 seconds run time every 10 minutes.

Air fluidizing system - The automatic system to assist in the flow of dry lime from the bin to the feeder consists of a silo pneumatically activated knifegate valve, an air-ring injector, and the silo dust collector. Each of these items has its own timing sequence as described below. The actual timing durations can be changed at any time through the PLC program. The sequence is as follows:

1. Close knifegate valve on silo outlet.
2. Start dust collector fan and reversing solenoids.
3. Open air injector supply solenoid valve.
4. Close air injector supply solenoid valve.
5. Stop reversing solenoids on dust collector followed by stopping fan.
6. Open knifegate valve on silo outlet.

Each of the three pairs of start/stops have a PLC set duration time and interval time which will be adjusted during system start-up. During the time that the valve is closed there is enough lime in the feeder hopper to prevent the feed system from starving.

OPEN AREA OF OUTLET FROM FAN AND ACOUSTIC DIFFUSER IS 10.3" x 5.12" = 0.366 SQUARE FEET

CHEMCO P.O. Box 549 • 105 Commerce Boulevard • Lawrence, PA 15055 • 412. 746-4410 • FAX 412. 746-4480

June 15, 1994

Mr. Kim Kruse
Rust International Corporation
Meadowbrook Corporate Park
100 Corporate Parkway
Birmingham, AL 35201-0101

RE: Wheelabrator-Pinellas Facility
Rust Purchase Order No. 4973-1
Hydrated Lime System

Dear Mr. Kruse:

In regards to your request for information on the lime silo dust collector, I have attached the manufacturers cut sheet. Chemco is providing a VS20KS3 with the following design specifications:

- Filter Area: 215 Square Feet
- Blow In Rate: 750-1000 SCFM
- Fill Cycle Duration: 40-60 Minutes Per Fill Cycle
- Fill Cycle Frequency: One Per 2-4 Days
- Cloth Loading: 3.5-4.6 SCFM/Square Feet
- Fan Capability: 1200 SCFM @ 5" W.C.
- Outlet Emissions: .00088 Grains/CF

If you need additional information on the dust collector for your air permit application, please advise.

Sincerely,

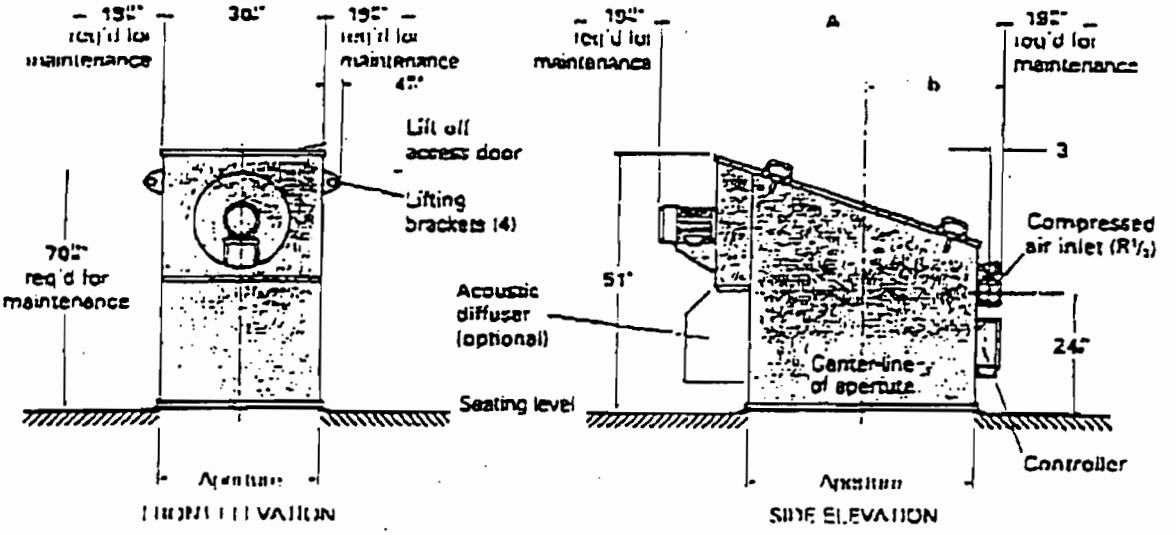
CHEMCO

James R. Veverka
Project Engineer

JRV/ams
Enclosures

DUST CONTROL EQUIPMENT

SILOAIR DUST FILTERS – SERIES VS



Siloair filter with integral fan

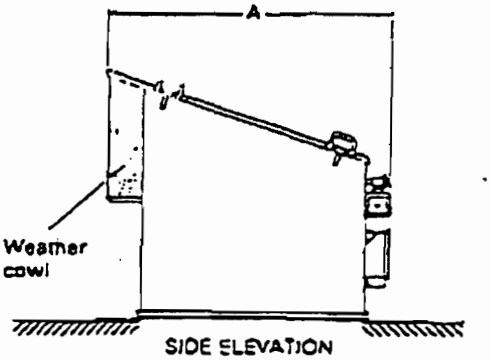
Model VS20 KS5 illustrated

Filter type	Filtration area	No. of cartridges	DIMENSIONS A	DIMENSIONS b	Fan type	Fan motor	Approx. net weight
VS10	108 ft²	4	44" 45"	17"	KS1 KS3	1.0 HP 2.0 HP	423 lbs* 443 lbs*
VS15	161 ft²	6	55" 56"	23"	KS1 KS3	1.0 HP 2.0 HP	492 lbs* 511 lbs*
→ VS20	215 ft²	8	67" [illegible]	29"	→ KS3 [illegible]	2.0 HP [illegible]	593 lbs* [illegible]

*Fan filters fitted with acoustic diffuser add 33 lbs

Filter type	DIMENSIONS A	Approx. net weight
VS10W	35"	370 lbs
VS15W	46"	439 lbs
→ VS20W	58"	520 lbs

For all other dimensions refer to table above



Siloair filter with weather cowl

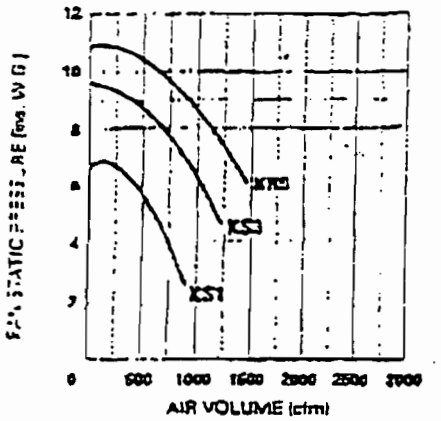
Model VS20W illustrated

COMPRESSED AIR REQUIREMENTS

Filter type	Working compressed air pressure*	Atmospheric air volume – F.A.D.* at 12 sec. intervals*	Pulse duration
VS10	70 psig	6.6 cfm	200 millisec.
VS15	80 psig	8.5 cfm	200 millisec.
→ VS20	80 psig	8.5 cfm	200 millisec.

*Normal operating pressure. *Recommended atmospheric air volume of clean, dry compressed air.
*Recommended initial settings these may be varied with experience.
For connection details please refer to DCE.

DUST CONTROL EQUIPMENT



To select the most suitable fan for a given application:

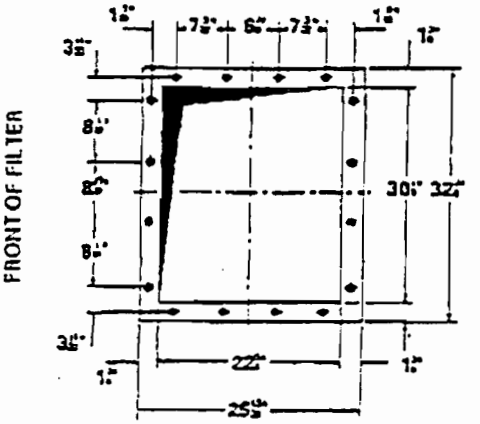
1. Determine the air volume flow ft³/min needed to give effective venting and dust control.
2. Estimate the pressure or suction (in.W.G.) in the housing on which the dust filter is positioned.
3. Assess the operational pressure drop (in.W.G.) across the clean side and dirty side of the filtering element – usually between 2 – 5 in. W.G.
4. The sum of 2 and 3 gives the pressure (in.W.G.) required for fan selection purposes.
5. Consult graph for fan performances available.

Fan performance curves

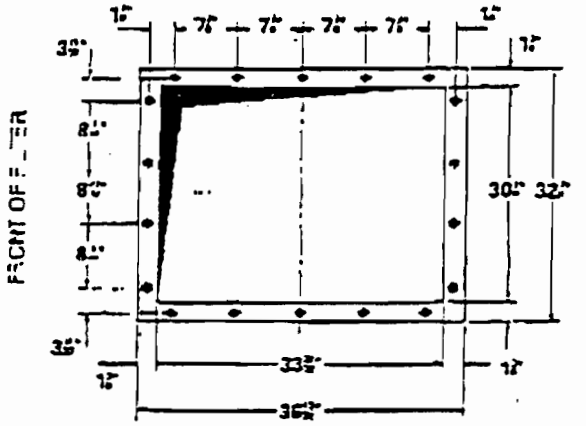
WEIGHTED SOUND PRESSURE LEVELS

All readings were taken in semi-reverberant surroundings 3'3" radius from the equipment housing and 20" above base level, using a precision sound level meter and octave filter.

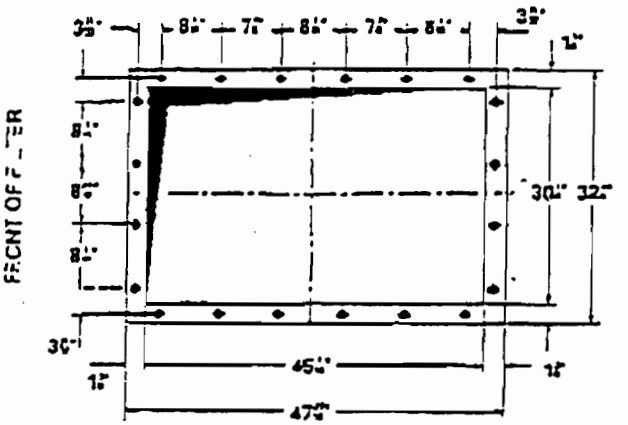
	With acoustic	Without acoustic
VS10 KS1	74dB(A)	63dB(A)
VS10 KS3	74dB(A)	81dB(A)
VS15 KS1	74dB(A)	63dB(A)
VS15 KS3	74dB(A)	81dB(A)
VS20 KS3	74dB(A)	81dB(A)
VS20 KS5	76dB(A)	85dB(A)



VS10



VS15



VS20

Aperture and mounting flange details

All holes ⅝" diameter for ½" diameter bolts.

ELECTRICAL REQUIREMENTS

VS10 and VS15 filters: DS 2-way controller

VS20 filter: DS 3-way controller

Voltage input: 110V. (±10%) A.C. two-wire 50-60 Hz.

Connection: Line-line or line-neutral

Fan motor (if fitted): To suit local voltage

DESIGN LIMITS (standard equipment)

Temperature range: 14°F to 140°F

Pressure range: −20" W.G. to +15" W.G.

Dimension tolerances: ±⅜" on main dimensions; ±¼" on detail dimensions

460 V, 3Φ

ATTACHMENT 16
OPERATION AND MAINTENANCE PLAN - LIME SILO
(12 Additional Pages)

WHEELABRATOR PINELLAS

LIME SOFTENER SYSTEM
LIME SILO EXHAUSTER AND DUST COLLECTOR
OPERATION AND MAINTENANCE PLAN

REVISION 1
MARCH 10,1995

TABLE OF CONTENTS

PINELLAS COUNTY, FLORIDA
LIME SOFTENER SYSTEM

I. DESCRIPTION OF LIME SILO DUST COLLECTOR AND EXHAUSTER OPERATION

The hydrated lime silo is designed to store dry lime for the clarifier in the water treatment facility. Operation of the silo exhauster and dust collector during truck unloading is described below:

The lime truck unloading equipment consisting of a fill line, storage silo, and silo dust collector - allows a hydrated lime supply truck to pneumatically transfer dry lime to the bulk storage bin. The dust collector on the silo roof permits the transfer air to escape into the atmosphere during the transfer process without lime dust contamination. The dust collector fan (in auto mode) and timer sequencer are energized when the fill line cap is removed and stops after a time delay when the cap is replaced. (Note: The dust collector is also controlled through the air fluidizing system - See description below.) If at any time emissions are visible from the dust collector exhaust stop unloading immediately and call the supervisor.

NOTE: Over-pressurizing of the silo could occur during the truck unloading process or during the air fluidizing process. A pressure/vacuum relief vent is provided on the silo roof and factory set to relieve at +7" and -1". If a white dust plume is seen coming out of the vent, all processes should be stopped to determine the cause of the over-pressure.

Air fluidizing system - The automatic system to assist in the flow of dry lime from the bin to the feeder consists of a silo pneumatically activated knifegate valve, an air-ring injector, and the silo dust collector.

PREVENTATIVE MAINTENANCE INSPECTIONS

LIME WATER SOFTENING SYSTEM LIME SILO

JOB TASK	FREQUENCY
Inspect Valves	Monthly
Drain moisture from separator	Weekly
Check differential pressure	Weekly
Clean moisture separator	Annual
Inspect air manifold	Annual
Check dust seals	Annual
Check jet tubes	Annual
Check cartridges	Annual

SPARE PARTS INVENTORY
LIME SOFTENING SYSTEM LIME SILO

Part	Inventory
Motor	1
Valve	1
Gasket	2
Gasket	2
Seal Ring, Cartridge	2
Cartridge	2

BEST AVAILABLE COPY

Appendix 1

```
3/08/95                MAINTENANCE ASSIGNMENTS CURRENT STATUS REPORT                 PMC702
[illegible]                          TASK LINES ONLY                                  LEDFORDP
[illegible]                     SORT BY EQUIPMENT ID ONLY                             PAGE:     1
                          SELECTED TASK RANGE: 001 THRU 999

[illegible]                  [illegible] 02721      COOLING WATER       ** CRITICAL
[illegible]                  [illegible]            DAYS OPERATED       *  OVERDUE         0275263591LINE
                             [illegible]                                +  ASSIGNED     AS OF  3/08/95

**************************************************      -- SERVICE PERIOD --   LAST SERVICED    -------LABOR-------
*     PREDICTIVE MAINTENANCE INSPECTIONS         *      FREQUENCY  ACTUAL DO   UNITS   DATE     CRAFT  HOURS  MEN
**************************************************
INSPECT [illegible]                    DAYS OPERATED      30                    2/08/95  ELEC    2.00   1
PRTY:
STATUS:            [illegible]
SHUTDOWN CLASS:    [illegible]   SUPERVISOR:   CREW:   PM/STNDD P  SERVICE HISTORY? Y
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
[illegible]                            DAYS OPERATED      7                     2/08/95  OPER    1.00   1
PRTY:
STATUS:            [illegible]
SHUTDOWN CLASS:    [illegible]   SUPERVISOR:   CREW:   PM/STNDD P  SERVICE HISTORY? Y
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
CHECK [illegible]                      DAYS OPERATED      7                     2/08/95  ELEC    2.00   1
PRTY:
STATUS:            [illegible]
SHUTDOWN CLASS:    [illegible]   SUPERVISOR:   CREW:   PM/STNDD P  SERVICE HISTORY? Y
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
CLEAN [illegible]                      DAYS OPERATED      365                   2/08/95  ELEC    2.00   1
PRTY:
STATUS:            [illegible]
SHUTDOWN CLASS:    PLANNED:      SUPERVISOR:   CREW:   PM/STNDD P  SERVICE HISTORY? Y
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
INSPECT AIR [illegible]                DAYS OPERATED      365                   2/08/95  ELEC    2.00   1
PRTY:
STATUS:            [illegible]
SHUTDOWN CLASS:    PLANNED:      SUPERVISOR:   CREW:   PM/STNDD P  SERVICE HISTORY? Y
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
CHECK [illegible]                      DAYS OPERATED      365                   2/08/95  MECH    2.00   1
PRTY:
STATUS:            [illegible]
SHUTDOWN CLASS:    PLANNED:      SUPERVISOR:   CREW:   PM/STNDD P  SERVICE HISTORY? Y
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
CHECK [illegible] TUBES                DAYS OPERATED      365                   2/08/95  MECH    3.00   2
PRTY:
STATUS:            [illegible]
SHUTDOWN CLASS:    PLANNED:      SUPERVISOR:   CREW:   PM/STNDD P  SERVICE HISTORY? Y
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
CHECK CARTRIDGES                       DAYS OPERATED      365                   2/08/95  MECH    8.00   2
PRTY:
STATUS:            [illegible]
SHUTDOWN CLASS:    PLANNED:      SUPERVISOR:   CREW:   PM/STNDD P  SERVICE HISTORY? Y
```

APPENDIX 2

WORK ORDER NO — W O R K O R D E R — PAGE: 1

PIS01106-00 — 02 PINELLAS FACILITY — DATE: 3/10/95

MACH LOC	DEPARTMENT ID	PRI CDE	REQ BY	WORK TYPE	PLNR CODE	SUPV CODE	CREW CODE	PLANNED START	SHUT DOWN	PERMIT NUMBER
21	ELECTRICAL	01	LJS		LJS	RDW		3/10/95		

LOCATION : COOLING WATER — REPL MACHINE ID: _____

MACHINE : 526359LIME LIME BIN VENT FAN

SERIAL # :

MODEL # : VS20KS3

---PROBLEM DESCRIPTION---

SHORT DESC: 031095-P.M. LIME BIN VENT FAN

FULL DESC:

TASK	MAINT. TASK DESCRIPTION	CRAFT CODE	NO MN	EST HOURS	UNITS AT SERVICE
201	INSPECT VALVES	ELEC	1	2.00	_____
	CMPNT: REPAIR CODE: N/R/S:				_____
					_____
	PRI : LEAD PERSON:				_____
	CMPLT: _____ DELAY CODE: _____				
	CHECK OPERATION OF SOLENOID AND DIAPHRAGM VALVES. IF IT IS FOUND NECESSARY TO CHANGE THE DIAPHRAGMS, REMOVE THE VALVE FROM THE MANIFOLD.				
203	CHECK DIFFERENTIAL PRESSURE	ELEC	1	2.00	_____
	CMPNT: REPAIR CODE: N/R/S:				_____
					_____
	PRI : LEAD PERSON:				_____
	CMPLT: _____ DELAY CODE: _____				
	CONNECT MANOMETER TO TAPPING POINTS AND MEASURE THE PRESSURE DROP ACCROSS THE FILTER. IF THE D/P INCREASES MORE THAN 10% OVER TWO OR THREE SUCCESSIVE CHECKS TURN IN A WORK ORDER TO HAVE THE FILTERS INSPECTED AND REPAIRED.				
204	CLEAN MOISTURE SEP. FILTER	ELEC	1	2.00	_____
	CMPNT: REPAIR CODE: N/R/S:				_____
					_____
	PRI : LEAD PERSON:				_____
	CMPLT: _____ DELAY CODE: _____				
	ISOLATE AIR SUPPLY. REMOVE AND CLEAN FILTER ELEMENT.				
205	INSPECT AIR MANIFOLD	ELEC	1	2.00	_____
	CMPNT: REPAIR CODE: N/R/S:				_____
					_____
	PRI : LEAD PERSON:				_____

PI501106-00 | 02 PINELLAS FACILITY | DATE: 3/10/95

MACH LOC	DEPARTMENT ID	PRI CDE	REQ BY	WORK TYPE	PLNR CODE	SUPV CODE	CREW CODE	PLANNED START	SHUT DOWN	PERMIT NUMBER
21	ELECTRICAL	01	LJS		LJS	RDW		3/10/95		

LOCATION : COOLING WATER REPL MACHINE ID: _____
MACHINE : 526359LIME LIME BIN VENT FAN
SERIAL # :
MODEL # : VS20KS3

TASK	MAINT. TASK DESCRIPTION	CRAFT CODE	NO MN	EST HOURS	UNITS AT SERVICE
205	INSPECT AIR MANIFOLD	ELEC	1	2.00	_____
	CMPNT: REPAIR CODE: N/R/S:				_____
	ISOLATE AIR SUPPLY. REMOVE DRAIN PLUG AND AIR INLET CONNECTIONS. CLEAN OUT ANY ACCUMULATED SLUDGE. CHECH PRESSURE RELIEF VALVE FOR CORRECT OPERATION.				

TASK	EMP ID	CRFT CD	DLAY CD	HRS	R/C	HRS	R/C	HRS	R/C	HRS	R/C

APPROVED BY: _____ | START DATE: _____ | CMPLT DATE: _____

WORK ORDER NO: PI501107-00 | W O R K O R D E R | PAGE: 1

02 PINELLAS FACILITY | DATE: 3/10/95

MACH LOC	DEPARTMENT ID	PRI CDE	REQ BY	WORK TYPE	PLNR CODE	SUPV CODE	CREW CODE	PLANNED START	SHUT DOWN	PERMIT NUMBER
021	OPERATIONS	01	LJS		PH	PH		3/10/95		

LOCATION : COOLING WATER — REPL MACHINE ID: _____

MACHINE : 526359LIME LIME BIN VENT FAN

SERIAL # :

MODEL # : VS20KS3

---PROBLEM DESCRIPTION---

SHORT DESC: 031095-P.M, LIME BIN VENT FAN

FULL DESC:

TASK	MAINT. TASK DESCRIPTION	CRAFT CODE	NO MN	EST HOURS	UNITS AT SERVICE
202	DRAIN MOISTURE FROM SEPARATOR	OPER	1	1.00	
	CMPNT: REPAIR CODE: N/R/S:				
	PRI : LEAD PERSON:				
	CMPLT: _____ DELAY CODE: _____				
	OPEN VALVE AT BOTTOM OF SEPARATOR, ALLOW COLLECTED WATER TO DRAIN OFF, THEN CLOSE VALVE.				

TASK	EMP ID	CRFT CD	DLAY CD	HRS	R/C	HRS	R/C	HRS	R/C	HRS	R/C

APPROVED BY: PHL | START DATE: | COMPLT DATE:

WORK ORDER NO: PISC1105-00 | W O R K O R D E R | PAGE: 1

02 PINELLAS FACILITY | DATE: 3/10/95

MACH LOC	DEPARTMENT ID	PRI CDE	REQ BY	WORK TYPE	PLNR CODE	SUPV CODE	CREW CODE	PLANNED START	SHUT DOWN	PERMIT NUMBER
21	MECHANICAL	01	LJS		LJS	FCS		3/10/95		

LOCATION : COOLING WATER REPL MACHINE ID: _____

MACHINE : 526359LIME LIME BIN VENT FAN

SERIAL # :

MODEL # : VS20KS3

---PROBLEM DESCRIPTION---

SHORT DESC: 031095-P.M. LIME BIN VENT FAN

FULL DESC:

TASK	MAINT. TASK DESCRIPTION	CRAFT CODE	NO MN	EST HOURS	UNITS AT SERVICE
206	CHECK DUST SEALS	MECH	1	2.00	
	CMPNT: REPAIR CODE: N/R/S:				
	PRI : LEAD PERSON:				
	CMPLT: _____ DELAY CODE: _____				
	CHECK DUST SEAL ON COVER FOR DAMAGE OR AGEING. REPLACE AS NECESSARY TO MAINTAIN A GOOD SEAL				
207	CHECK JET TUBES	MECH	2	3.00	
	CMPNT: REPAIR CODE: N/R/S:				
	PRI : LEAD PERSON:				
	CMPLT: _____ DELAY CODE: _____				
	CHECK THAT THE TUBES ARE CLEAN AND THAT THE JET ORFICES ARE CLEAR				
208	CHECK CARTRIDGES	MECH	2	6.00	
	CMPNT: REPAIR CODE: N/R/S:				
	PRI : LEAD PERSON:				
	CMPLT: _____ DELAY CODE: _____				
	REMOVE EACH CARTRIDGE AND INSPECT CONDITION OF THE FABRIC. CLEAN THE OUTSIDE OF THE CARTRIDGE WITH A VACUUM CLEANER. REPLACE DAMAGED OR WORN CARTRIDGES. REMOVE ANY DUST THAT HAS ENTERED THE FAN INLET ETC. BEFORE RESTARTING THE FILTER.				

APPROVED BY: PHL | START DATE: | CMPLT DATE:

CONTINUED ON NEXT PAGE

WORK ORDER NO — W O R K O R D E R — PAGE: 2

PIS01105-00 — 02 PINEGGAS FACILITY — DATE: 3/10/95

MACH LOC	DEPARTMENT ID	PRI CDE	REQ BY	WORK TYPE	PLNR CODE	SUPV CODE	CREW CODE	PLANNED START	SHUT DOWN	PERMIT NUMBER
21	MECHANICAL	01	LJS		LJS	FCS		3/10/95		

LOCATION : COOLING WATER — REFL MACHINE ID: _____

MACHINE : 526359LIME LIME BIN VENT FAN

SERIAL # :

MODEL # : VS20KS3

TASK	EMP ID	CRFT CD	DLAY CD	HRS	R/C	HRS	R/C	HRS	R/C	HRS	R/C

APPROVED BY: PHL — START DATE: — CMPLT DATE: -

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APPENDIX 3

Date: 2/16/9[illegible]
Time: 14:1[illegible]

BILL OF MATERIALS MADE
BY COMPONENT
Company No 1

Machine Id	Machine Description
526359LIME	LIME BIN [illegible]

Cmpt/Kit	Part Id	Description	QTY
	27572US34	[illegible]	[illegible]
	3189-9002	[illegible]	[illegible]
	5119-0042	[illegible]	[illegible]
	5119-0052	[illegible]	2
	5139-0005	[illegible] CARTRIDGE	2
	5139-2000	[illegible]	2

ATTACHMENT 17
ADDITIONAL APPLICABLE REQUIREMENTS - LIME SILO
(Operating Permit AO52-268853 for Lime Silo)
(7 Additional Pages)

Department of Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

Virginia B. Wetherell
Secretary

PERMITTEE:

Pinellas County Board of
County Commissioners
Department of Solid Waste
Management
2800 110th Avenue North
St. Petersburg, FL 33716 /

PERMIT/PROJECT:

Permit No: AO52-268853
County: Pinellas
Expiration Date: 05/30/00
Project: Hydrated Lime
Storage Silo

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 62-200 through 297 & 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the operation of a Hydrated Lime Storage Silo at the Resource Recovery Facility. Emissions created during silo filling are controlled by a DCE, Inc., Model VS20KS3 baghouse. The baghouse has a total cloth filtration area of 215.0 square feet.

Location: 2800 110th Avenue North, St. Petersburg, Pinellas County

UTM: 17-335.2 E 3084.1 N NEDS NO: 0117 Point ID: 04

Replaces Permit No.: AC52-259351

PERMITTEE:
Pinellas County Board of
County Commissioners
Department of Solid Waste
Management

PERMIT No.: AO52-268853
Project: Hydrated Lime
Storage Silo

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions (Rule 62-4.160, F.A.C.).

2. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Rules 62-200 through 62-297, or any other requirements under federal, state, or local law.

3. In order to be exempt from the requirements of Rule 62-296.700, F.A.C., (Particulate RACT), particulate matter emissions from this source shall not exceed 4.9 pounds/hour and 14.9 tons/year (Rule 62-296.700(2), F.A.C.).

4. Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because this source is equipped with a baghouse control device, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a visible emission limitation not to exceed an opacity of 5% in lieu of a particulate stack test.

5. The Hydrated Lime Storage silo shall be tested for visible emissions annually within 60 days prior to or on February 15. The test report shall be submitted in duplicate, within 45 days after the test is completed to the Air Compliance Section of the Department's Southwest District Office and the Pinellas County Department of Environmental Management, Air Quality Division (Rules 62-297.340(1)(a) and 62-297.420(2), F.A.C.).

6. The baghouse exhaust point shall be tested by a certified observer in accordance with DEP Method 9 for a minimum of 30 minutes or, if the operation is normally completed within less than 30 minutes and does not recur within that time, the test shall last for the length of the batch cycle or operation completion time (Rule 62-297.330(1)(b)1., F.A.C.).

7. The permittee shall conduct emissions testing while filling the silo at a rate that is representative of the normal silo filling rate. The normal silo filling rate shall be at least 25 tons/hour and occur in less than one hour. Each test report shall state the actual silo filling rate during emissions testing (Rule 62-4.070(3), F.A.C.).

8. The owner or operator shall notify the Air Compliance Section of the Department's Southwest District Office at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted (Rule 62-297.340(1)(i), F.A.C.).

9. Should the Department have reason to believe the particulate matter emission standard is not being met, the Department may require that compliance with the particulate matter emission standard be demonstrated by testing in accordance with Rule 62-297, F.A.C.(Rule 62-297.620(4), F.A.C.).

10. All reasonable precautions shall be taken to prevent emissions of unconfined particulate matter. Reasonable precautions shall include but are not limited to the following (Rule 62-296.310(3), F.A.C.):

A. Application of water when necessary to control emissions.
B. Removal of particulate matter from roads and other paved areas under control of the owner or operator to prevent reentrainment, and from buildings or work areas to prevent particulate emissions.
C. Enclosure or covering of conveyor systems.
D. Curtailing of operations if winds are entraining unconfined particulate matter.
E. Posting of vehicle (or truck) speed limits.

11. The permittee shall not allow any person to circumvent any pollution control device or allow the emissions of air pollution without the applicable air pollution control device operating properly (Rule 62-210.650, F.A.C.).

12. The DCE, Inc., Model VS20KS3 baghouse shall be operated and maintained in accordance with the Operation and Maintenance (O&M) Plan that was submitted as part of the Application for Air Permit - Short Form received on 04/03/95 and made a part of this operating permit. The O&M documentation logs shall be maintained for a minimum of the most recent two years and be made available for inspection upon request (Pinellas County Ordinance No. 95-27, Subpart 2.230).

13. The permittee shall submit a minimum of two, Application for Air Permit - Short Form, (DEP Form No. 62-210.900(2)) for the renewal of this operating permit to the Air Permitting Section of the Department's Southwest District Office at least 60 days prior to the expiration date of this operating permit (Rule 62-4.090, F.A.C. and Pinellas County Ordinance 95-27, Subpart 2.210.300).

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

/S/ Dr. Richard D. Garrity, Ph.D.
Director of District Management
Southwest District

3804 Coconut Palm Drive
Tampa, FL 33619-8318
(813)744-6100

ATTACHMENT - GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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

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

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

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

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

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

GENERAL CONDITIONS:

a. Have access to and copy any records that must be kept under the conditions of the permit;

b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

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

Reasonable time may depend on the nature of the concern being investigated.

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

a. a description of and cause of non-compliance; and

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

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

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

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

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

GENERAL CONDITIONS:

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

13. This permit also constitutes:

( ) Determination of Best Available Control Technology (BACT)
( ) Determination of Prevention of Significant Deterioration (PSD)
( ) Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

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

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

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

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

ATTACHMENT 18
DESCRIPTION OF CONTROL EQUIPMENT - METAL RECOVERY SYSTEM
(4 Additional Pages)

Newell Industries, Inc.

19 August 1988 *80 TB U W D I D4 1.0 U X

INVESTMENT SUMMARY

NEWELL 80104 TBD DRY ASH SHREDDING SYSTEM

Item# 1	- Grizzly Separator and Oscillating Feeder	51,800.00
Item# 2	- < 10 Inch Trommel Feed Conveyor	60,100.00
Item# 3	- > 10 Inch Infeed Conveyor	189,300.00
Item #4	- 1.5 Inch Sizing Trommel	172,400.00
Item #5	- 1.5 Inch Trommel Undersize Conveyor	50,900.00
Item #6	- Twin Trommel Diverter Gate	5,250.00
Item #7	- Twin Trommel Feeder Conveyors (2)	26,440.00
Item #8	- Twin Ash Trommels (2)	275,200.00
Item #9	- Twin Trommel Undersize Conveyor	46,000.00
Item #10	- Twin Trommel Discharge Transfer Conveyor	22,190.00
Item #11	- Non-Ferrous Bypass Stacking Conveyor	17,500.00
Item #12	- Impact Crusher Feeder Conveyor	34,440.00
Item #13	- Vibrating Feeder Hopper	12,000.00
Item #14	- Impact Crusher	60,000.00
Item #15	- 2 Stage Trommel Infeed Conveyor	17,700.00
Item #16	- 2 Stage Trommel	110,930.00
Item #17	- 2 Stage Trommel Discharge Conveyor	13,200.00
Item #18	- 1.5 Inch Oversize Transfer to Infeed Conveyor	26,190.00
Item #19-	Tramp from 1.5 Inch Transfer Conveyor	21,800.00
Item #20	- Tramp Recovery Transfer Conveyor	17,250.00
Item #21	- Oversize and Ferrous Return to Infeed Conveyor	37,500.00
Item #22	- Bypass Flop Gate	6,300.00
Item #23	- Infeed Device with Double Feed Roll plus	
Item #24	- Newell 80104 TBD Shredder	599,500.00
Item #25	- 1000 hp Main Drive Motor System	135,000.00
Item #26	- Drive Shaft	12,500.00
Item #27	- Undermill Oscillating Conveyor	33,075.00
Item #28	- 48 X 60 Magnetic Drum Separator	36,350.00
Item #29	- Ferrous Cleaning Trommel Feed Conveyor	20,850.00
Item #30	- Ferrous Cleaning Trommel	95,250.00
Item #31	- Ash Transfer Conveyor	40,890.00
Item #32	- Tailings Tramp System	30,800.00
Item #33	- Ash Stockpile Conveyor	40,890.00
Item #34	- Non-Ferrous / Ash Conveyor	28,120.00
Item #35	- Non-Ferrous / Cyclone Ash Transfer Conveyor	37,360.00
Item #36	- Air System from Shredder /Crusher with Scrubber	195,000.00
Item #37	- Air System from Trommels with Scrubber	125,000.00
Item #38	- Scrubber Sludge Settling Tank	
Item #39	- Scraper Conveyor	
Item #40	- Shredder Cyclone Shuttle Conveyor	17,000.00
Item #41	- Motor Control Center & Operator's Control Panel	48,250.00
Item #42	- Hydraulic Pin Puller with Platform	18,375.00

TOTAL INVESTMENT REQUIRED FOB San Antonio, Texas $2,788,600.00
U.S. Funds

Extent of Supply

Conveyor complete with geared motor drive unit
Feed Hopper
Maintenance Walkway
Supporting Structure

Item #35 - NON-FERROUS / CYCLONE ASH TRANSFER CONVEYOR

The undersize material from the Ferrous Sizing Trommel falls to a chute and to the Ash Transfer Conveyor for movement toward the Ash Stockpile Conveyor. This 36 inch rubber belt conveyor is 90 feet (27 m) long and is powered by a 7.5 hp (5.6 kw) electric motor. The conveyor is, covered with inspection ports at a maximum of fifteen feet apart. The inspection ports are framed openings with a piece of conveyor belt as a flap cover. This conveyor is provided with a maintenance walkway along the full length that allows for access to the idler grease fittings for all idlers, which are all located on one side of the conveyor.

Technical Data

Overall Length	:	90 ft. (27.4 m)
Belt Width	:	36 in. (900 mm)
Troughing Angle	:	0 - 20 degrees
Drive Motor	:	7.5 hp (5.6 kw)
Walkway Width	:	36 in.

Extent of Supply

Conveyor complete with motor drive unit
Feed Hopper
Maintenance Walkway
Supporting Structure

Item # 36 - AIR SYSTEM FROM SHREDDER/CRUSHER WITH SCRUBBER

The air system from the shredder moves air from a pickup point just over the end of the undermill oscillator. This ventilates the shredder and controls the dust created by the shredding process.

The system also makes a primary air separation of the lighter non metallics from the shredded material as it exits from the shredder and the undermill oscillator. The air moves from the pick up point to a cyclone by means of ductwork. The ductwork and cyclones are protected from explosions by use of explosion panels at stratigic points on the equipment. Most of the airborne particles are removed by the cyclone airlock combination and the air is then passed through a fan and blown into a water type scrubber for a final cleaning of the air before it is discharged to the atmosphere.

The waste material collected in the cyclone is discharged onto the Non-Ferrous / Cyclone Ash Transfer Conveyor. The waste material removed through the scrubbing action of the water in the scrubber leaves the scrubber with the water and goes to a settling tank. The material that settles out of the water is removed by a self cleaning scraper conveyor that lifts the sediment up onto the Ash Transfer Conveyor.

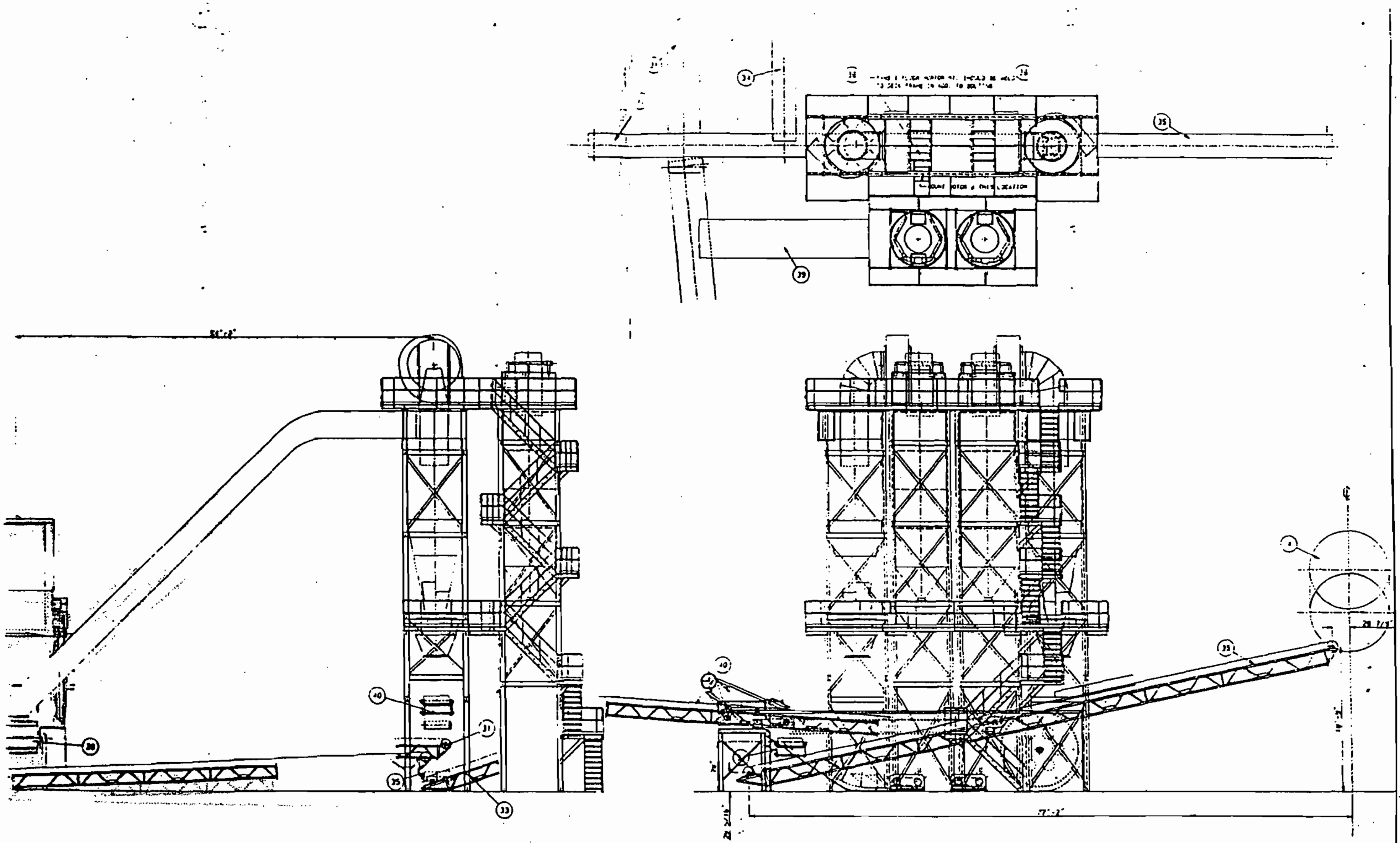
Technical Data

Diameter of Cyclone	:	108 in. (2790 mm)
Height of Cyclone	:	30 ft. (9.1 m)
Volume of Air	:	40,000 CFM (68,000 cubic meters per hour)
Fan Motor	:	200 hp
Diameter of Ductwork	:	36 in. (900 mm)
Length of Ductwork	:	approx 60 ft. (18.3 m)
Thickness of Ductwork	:	.25 in. (6 mm)
Size of Airlock	:	48 Inches (1200 mm)
Airlock Drive Motor	:	7.5 hp (5.6 kw)
Diameter of Scrubber	:	90 in. (2250 mm)
Water Pump Drive Motor	:	15 hp (11.2 kw)
Water Capacity of Pump	:	300 gal/min (1100 liters/min)
Self Cleaning Water Tank Capacity	:	12,000 gal (45,000 liters)
Horse Power of Scraper Conveyor	:	2 hp (1.5 kw)

Extent of Supply

All ductwork and necessary transitions
Cyclone complete with airlock
200 hp fan with a single 200 hp drive motor
Scrubber complete with water connections, etc.
Self cleaning water settlement tank complete with scraper conveyor, etc.
Support structure
Maintenance walkway

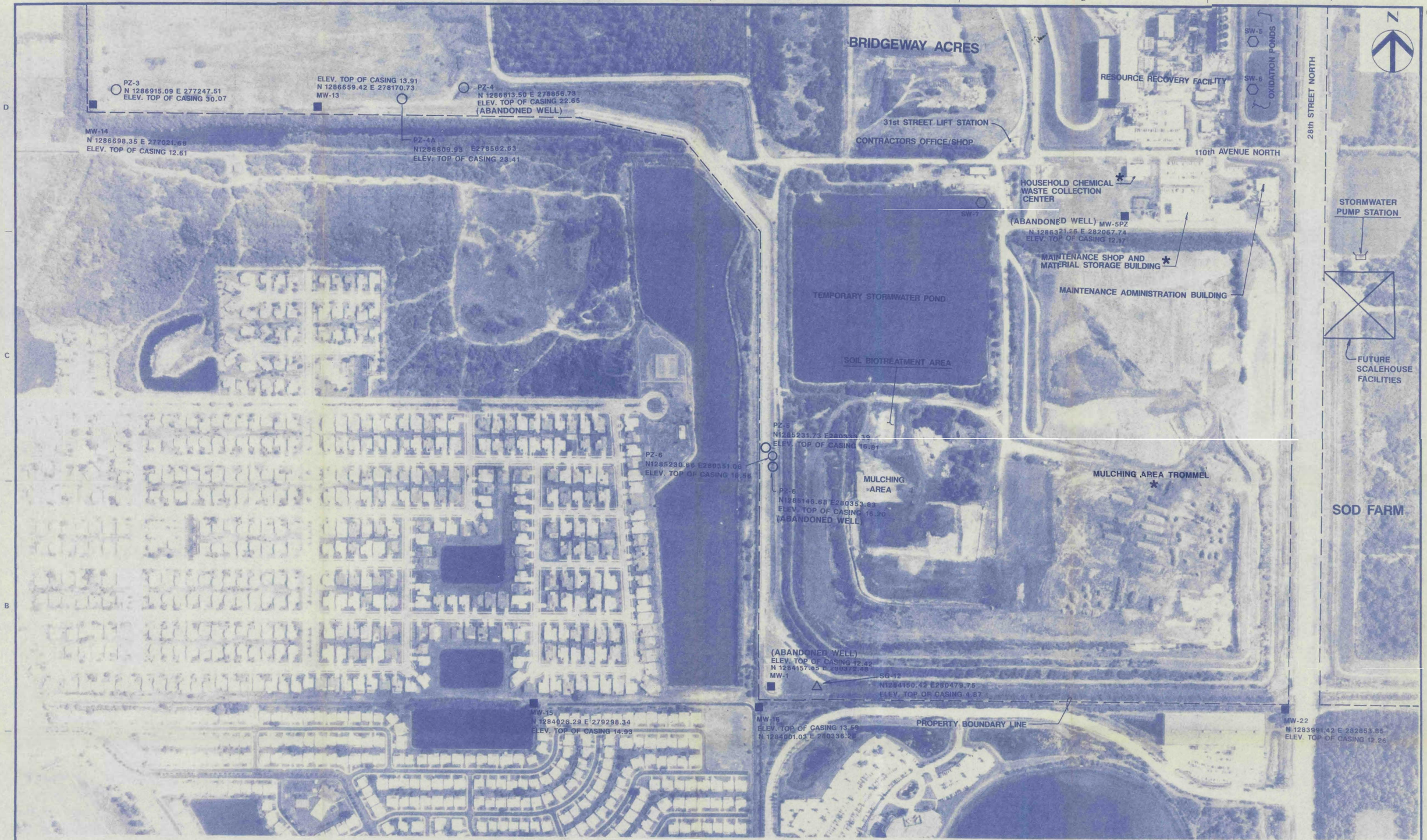
BEST AVAILABLE COPY



REMARKS:	
MATERIAL LIST NO	PARTS LIST NO
CUSTOMER	RESOURCE RECYCLING
LOCATION:	PINELLAS COUNTY, FL
TITLE	ELEVATIONS OF AIR SYSTEM W. SCRUBBER.
DATE	3/24/89
DWG NO	80-354-01

NEWELL INDUSTRIES, INCORPORATED

1030117-002-AU (1)



○ PIEZOMETERS ■ MONITOR WELL CLUSTERS ⬡ SURFACE WATER SAMPLING LOCATIONS △ STAFF GAUGE LOCATIONS

NOTES : ALL WELLS ARE SURFICIAL.
ALL ABANDONED WELLS TO BE PLUGGED.

✱ DIESEL GENERATOR SITE

HDR Engineering, Inc.
Tampa, Florida

AERIAL FLOWN 7-94
I.F.ROOKS & ASSOCIATES
106 N.W. DRANE ST.
PLANT CITY, FL. 33566
(813) 752-2113

Issue No.	Description	Date	D'wn.	Chk'd.	Resp. Engr.	Proj. Mgr.

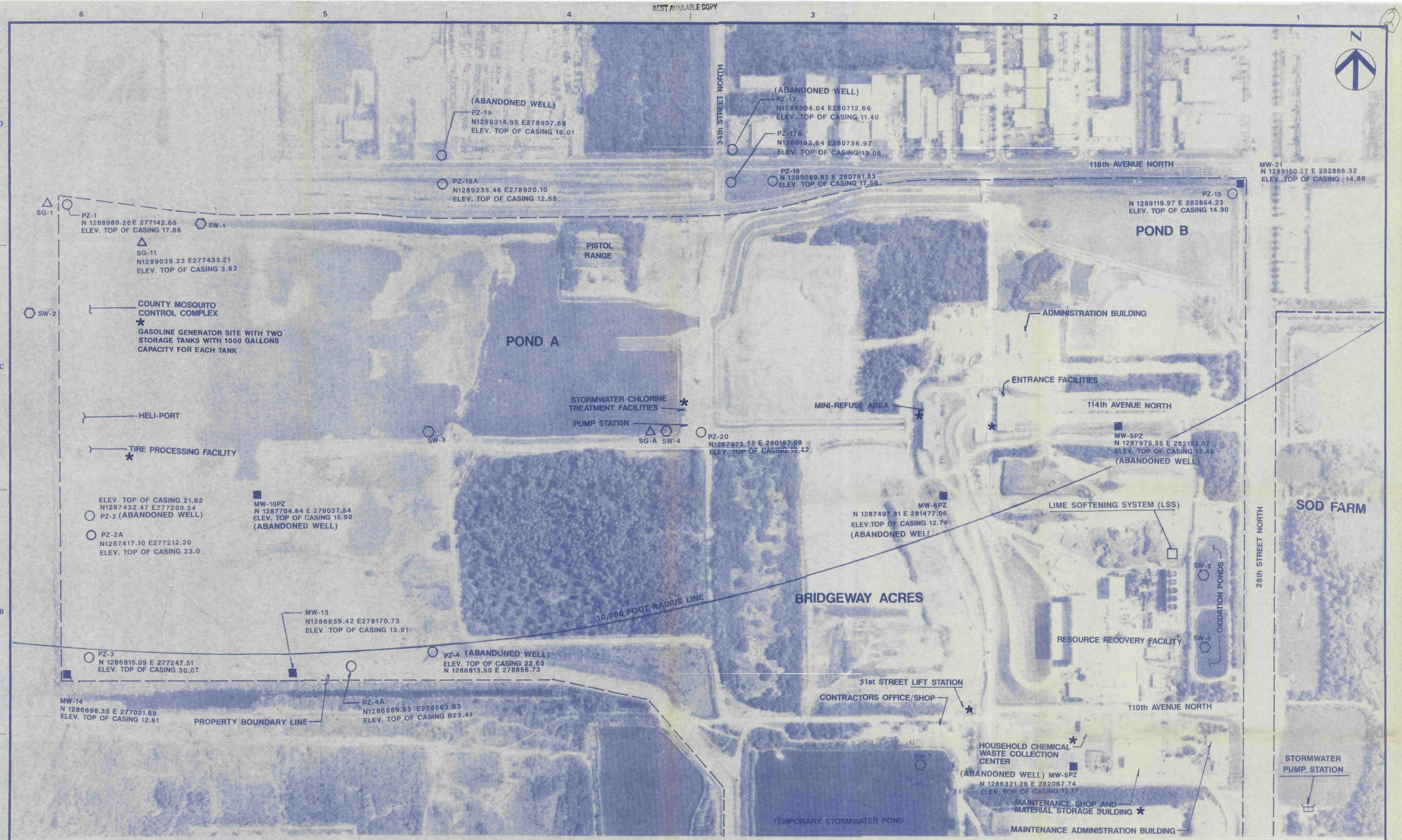
Project Manager: STASIS
Architect | I&C/ Process
Civil | Mechanical
Electrical: LARSON | Structural

BRIDGEWAY ACRES SANITARY LANDFILL
CLASS 1 OPERATING PERMIT

PINELLAS COUNTY FLORIDA

AERIAL SITE PLAN
BRIDGEWAY ACRES - SOUTHERN SITE FACILITIES AND MAINTENANCE AREAS

Date	Project No.	Drawing No.	Issue
Scale 1"= 200'	01617-188-096	P-2	0



○ PIEZOMETERS ■ MONITORING WELL CLUSTERS ⬡ SURFACE WATER SAMPLING LOCATIONS △ STAFF GAUGE LOCATIONS

NOTES : ALL WELLS ARE SURFICIAL.
ALL ABANDONED WELLS TO BE PLUGGED.

* DIESEL GENERATOR SITE OR GASOLINE GENERATOR SITE

HDR Engineering, Inc.
Tampa, Florida

AERIAL FLOWN 7-94
I.F.ROOKS & ASSOCIATES
106 N.W. DRANE ST.
PLANT CITY, FL. 33566
(813) 752-2113

Issue No.	Description	Date	Drwn.	Chkd.	Resp. Engr.	Proj. Mgr.

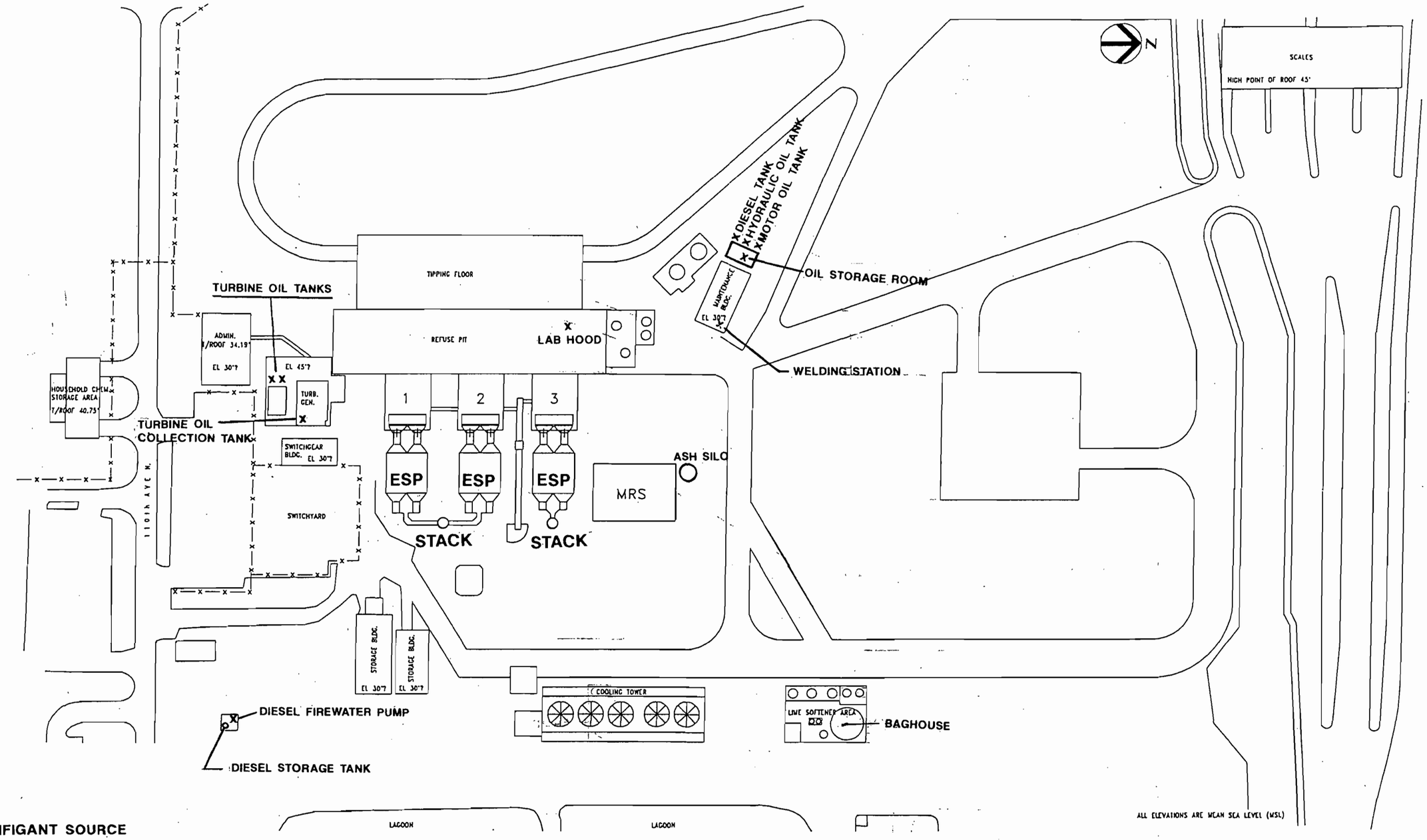
Project Manager: STASIS
Architect | I&C/Process
Civil | Mechanical
Electrical: LARSON | Structural

BRIDGEWAY ACRES SANITARY LANDFILL
CLASS 1 OPERATING PERMIT

PINELLAS COUNTY FLORIDA

AERIAL SITE PLAN
BRIDGEWAY ACRES - NORTHERN SITE FACILITIES AND MAINTENANCE AREAS

Date	Project No.	Drawing No.	Issue
Scale 1" = 200'	1617-188-096	P-1	0



X= INSIGNIFIGANT SOURCE

HDR Engineering, Inc.
Tampa, Florida

No.	Description	Date	Drawn	Chkd.	Design Engr.	Proj. Engr.

Project Manager: R. P. STASIS
Drawn By: SOLIE

PINELLAS COUNTY
RESOURCE RECOVERY FACILITY
TITLE V AIR PERMIT
PINELLAS COUNTY FLORIDA

EXISTING PCRRF
SITE PLAN

Date: 9/95
Project No.: 01617-188-096
Drawing No.: P-3