



Dames & Moore

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JUL 14 2000

June 28, 2000

BUREAU OF AIR REGULATION

Mr. Jerry Campbell
Environmental Protection Commission of Hillsborough County
1500 - 9th Avenue
Tampa, FL 33605

Re: **Gulf Coast Recycling, Inc.**
Construction Permit Applications
Facility No. 0057 Point ID 02

REC'D

JUN 29 2000

EPC of HC
AIR MANAGEMENT

Dear Mr. Campbell:

Please find attached permit applications for the construction of six new lead refining kettles, accompanied by the decommissioning of the three existing kettles and construction of a new baghouse system. This project is desired for three reasons. First, the existing kettles are in need of repair. Second, due to the need to process different lead formulations, additional kettles are needed. Third, in anticipation of adding a second production furnace in the foreseeable future, it is more economical to undertake the construction of these kettles all in one project.

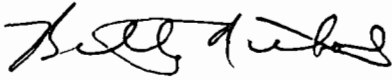
Although design capacities and unregulated potential emissions increases would be expected based on the proposed modifications, only minor increases in actual annual emissions are anticipated at this time. Existing allowable emissions established by the existing permits are sufficient. Any production increases above existing permit restrictions and corresponding increases in emissions will be addressed at such time as an application is submitted for the construction of a new production furnace.

Attached is a table which provides background information on the emissions from this operation. Note that presently the only pollutants limited by the existing permit are opacity, particulate and lead, with limits on hours of operation, natural gas consumption, and tons per charge. Upon issuance of this permit, the existing allowable emissions will be adequate since there should not be any increase in actual annual emissions for particulate and lead. Due to design considerations alone, there is a potential that NO_x, SO₂, CO and VOC could increase; however, actual emission increases for these pollutants would increase only as proportional to any fluctuation in actual production. Should allowables be required for these other pollutants, those listed in Item IV of the attached table would be sufficient.

Please let us know if you have any questions or need additional information at this time.

Sincerely,

URS Corporation



Billy R. Nichols, P.E.
Senior Department Head
Air Services

BRN/lms
Attachment

cc: Ms. Joyce Morales-Caramella

**REFINING OPERATION
EMISSIONS SUMMARY
GULF COAST RECYCLING**

June 22, 2000

I. Current Allowables

	<u>gr/dscf</u>	<u>lb/hr</u>	<u>T/yr</u>
Particulate	0.013	1.76	5.2
Lead	0.0002	-	-

II. Past Actuals (Two-Year Average)

Particulates	0.00036	0.04	0.14
Lead	0.000034	0.00053	0.023
NO _x *	-	-	16.8
CO**	-	-	0.70
SO ₂ **	-	-	0.005
VOC**	-	-	0.046

III. Existing Allowables (or Design Maximums where No Allowables Exist)

Particulates	0.013	1.76	5.2
Lead	0.0002	-	-
NO _x *	-	-	43.0
CO**	-	-	9.27
SO ₂ **	-	-	0.066
VOC**	-	-	0.61

IV. Projected Maximums (with Proposed Changes)

Particulates	0.005	1.9	5.2
Lead	0.0002	-	0.21
NO _x *	-	-	33.8
CO**	-	-	4.2
SO ₂ **	-	-	0.03
VOC**	-	-	0.28

NOTE: Gaseous emissions (except for NO_x from furnace fluxing) are based on natural gas combustion and are exhausted through stacks other than the baghouse.

* From AP-42 plus emissions from sodium nitrate fluxing

** From AP-42

GULF COAST RECYCLING

Last revised

6/26/00

	PWR T/hr in	Output T/hr out	PM lb/hr	PM gr/dscf	flow dscfm	Pb lb/hr	Pb gr/dscf	S02 lb/hr	CO lb/hr	N0x lb/hr	VOC lb/hr
Refining											
Jun-98	4.41	4.05	0.06	0.00057	12964	0.0010	0.000008			see below	
Jul-99	6.94	6.05	0.02	0.00014	13544	0.000062	0.000060				
<u>AVE(lb/hr)</u>	5.68	5.05	0.04			0.00053					
AVE(gr/dscf)/FLOW				0.00036	13544		0.000034				
Allowables(lb/hr)			1.76								
Allowable(T/yr)			5.2			0.10					
Allowable(gr/dscf)			0.013			0.00087					

Two Year Production

	average(T/hr)	average(T/hr)		
1998 metal charged(T)	32,242	4.1 metal produced(T)	24,274	3.1 Hours
1999 metal charged(T)	38,337	4.8 metal produced(T)	23,876	3.0 Hours
	35,290	4.4	24,075	3.0
yield	0.68			

REFINING (including kettle flues) (concentration calculations based on 6730 hours/yr past 2 year average)

Two Year Average Emissions

1998			0.0049	0.69	16.7	0.045	
1999			0.0051	0.72	16.9	0.047	
Average		0.14	0.023	0.0050	0.70	16.8	0.046

Current Allowables(T/yr)

5.2

Summary(T/yr)

Refining	0.14	0.023	0.005	0.704	16.8	0.046
total(T/yr)	0.14	0.02	0	1	16.76	0.0
Maximum to avoid PSD	15.00	0.60	40	100	40.00	40.0
	15.14	0.62	40	101	56.76	40.0

**PARTICULATE/LEAD PROJECTIONS
(VIA EXHAUST FLOW ESTIMATION)**

III. Refining Area Stack
 Temperature = 98
 Moisture = 2.0%
 Flow, ACFM = 30000

Flow, DSCF/Min
 27819
 27819 Total DSCFM

Required

Lead (lb/hr) = 0.048 (0.0002 gr/dscf)
 Lead (Tons/Yr) = 0.21
 PM (lb/hr) = 1.19 (0.005 gr/dscf)
 PM (Tons/Yr) = 5.2

Desired

Lead (lb/hr) = 0.048 (0.0002 gr/dscf)
 Lead (Tons/Yr) = 0.21
 PM (lb/hr) = 1.19 (0.005 gr/dscf)
 PM (Tons/Yr) = 5.2

**GASOUS EMISSION PROJECTIONS
(VIA BTU ESTIMATES)**

KETTLES - 3@ 4.0 MM Btu/Hr

Total Btu/Hr: 12000000
Total Ft³/Hr: 12000

	AP-42 Emission Factors			
	SO ₂	NO _x	CO	VOC
Lb/10 ⁶ Ft ³	0.6	100	84	5.5
Lb/Hr	0.0072	1.20	1.01	0.066
Tons/Yr	0.032	5.26	4.42	0.29

Projected NOx from Refining

NaNO ₃	360000	Lbs	<u>NOx(T/yr)</u>	28.8
EF	0.16 Lb NOx/NaNO ₃			

Past NOx Emissions

1998 NaNO ₃	198070		15.8	Past Two year average	15.9
1999 NaNO ₃	200000	Lbs	16.0		

Past Kettle Combustion Emissions

		SO ₂	NO _x	CO	VOC
1998	16.4 MMCF	0.0049	0.82	0.69	0.045
1999	17.1 MMCF	0.0051	0.86	0.72	0.047
	average	0.0050	0.84	0.70	0.046

KETTLES - 6@ 4.2 MM Btu/Hr

Total Btu/Hr: 25200000
Total Ft³/Hr: 25200

DESIGN

	AP-42 Emission Factors			
	SO ₂	NO _x	CO	VOC
Lb/10 ⁶ Ft ³	0.6	100	84	5.5
Lb/Hr	0.01512	2.52	2.12	0.1386
Tons/Yr	0.066	11.04	9.27	0.61

Projected Total NOx

33.8 T/YR

		SO ₂	NO _x	CO	VOC
PROJECTED	100 MMCF	0.0300	5.00	4.20	0.275



Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

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

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: Gulf Coast Recycling, Inc.	
2. Site Name: Gulf Coast Recycling, Inc.	
3. Facility Identification Number: 0570057 <input type="checkbox"/> Unknown	
4. Facility Location: Street Address or Other Locator: 1901 North 66 th Street City: Tampa County: Hillsborough Zip Code: 33619	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Application Contact

1. Name and Title of Application Contact: Ms. Joyce Morales-Caramella		
2. Application Contact Mailing Address: Organization/Firm: Gulf Coast Recycling, Inc Street Address: 1901 North 66 th Street City: Tampa State: FL Zip Code: 33619		
3. Application Contact Telephone Numbers: Telephone: (813) 626 - 6151 Fax: (813) 622 - 8388		

Application Processing Information (DEP Use)

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

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

- Initial Title V air operation permit for an existing facility which is classified as a Title V source.
- Initial Title V air operation permit 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: _____

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

Current construction permit number: _____

Operation permit number to be revised: _____

- Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected: _____

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

Operation permit number to be revised: _____

Reason for revision: _____

Air Construction Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

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

4. Professional Engineer Statement:

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

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

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

If the purpose of this application is to obtain a Title V source air operation permit (check here [], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

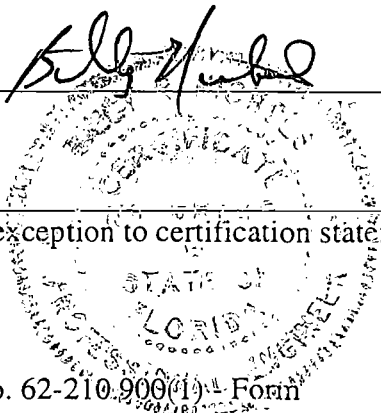
If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

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

Signature

Date 6/28/00

(seal)



* Attach any exception to certification statement.

Construction/Modification Information

1. Description of Proposed Project or Alterations:

- Construction of six (6) Refining Kettles and elimination of existing kettles
- Replacing 2 module baghouse with 4 module system
- Construction of new fan and stack

2. Projected or Actual Date of Commencement of Construction: ASAP after permit issuance

3. Projected Date of Completion of Construction: 5 months after commencement

Application Comment

The three existing kettles will be replaced by three new kettles. Three additional kettles will be constructed and dedicated for specialty alloys and in anticipation of production increases associated with the addition of a second furnace.

Facility Regulatory Classifications

Check all that apply:

1. <input type="checkbox"/> Small Business Stationary Source?	<input type="checkbox"/> Unknown
2. <input checked="" type="checkbox"/> Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. <input type="checkbox"/> Synthetic Minor Source of Pollutants Other than HAPs?	
4. <input type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)?	
5. <input type="checkbox"/> Synthetic Minor Source of HAPs?	
6. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS?	
7. <input checked="" type="checkbox"/> One or More Emission Units Subject to NESHAP?	
8. <input checked="" type="checkbox"/> Title V Source by EPA Designation?	
9. Facility Regulatory Classifications Comment (limit to 200 characters):	

List of Applicable Regulations

40 CFR 63 Subparts A & X	62-213 Major Source Op Permits
62-212.300 F.A.C.	62-297 Emissions Monitoring
62-296.603 F.A.C.	Core List
62-296.700 F.A.C.	
40 CFR 60.122(a)	
62-296.800 F.A.C.	
62-4.070(3) F.A.C.	
62-204 F.A.C. General Provisions	
62-210 F.A.C. Stationary Sources – General Requirements	
62-212 Stationary Sources – Preconstruction Review	

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
PM	B		20.3	ESCPSD	
SO ₂	A		1015	ESCPSD	
NO _x	B		NA		
CO	A		1400	ESCPSD	
VOC(THC)	A		116	ESCPSD	THC, as propane
Lead	B		<2.0	ESCPSD	

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities: <input type="checkbox"/> Attached, Document ID:_____ <input checked="" type="checkbox"/> Not Applicable
9. List of Equipment/Activities Regulated under Title VI: <input type="checkbox"/> Attached, Document ID:_____ <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input checked="" type="checkbox"/> Not Applicable
10. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID:_____ <input checked="" type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID:_____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements: <input type="checkbox"/> Attached, Document ID:_____ <input checked="" type="checkbox"/> Not Applicable
13. Risk Management Plan Verification: <input type="checkbox"/> Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID:_____) or previously submitted to DEP (Date and DEP Office:_____)) <input type="checkbox"/> Plan to be submitted to CEPPO (Date required:_____)) <input checked="" type="checkbox"/> Not Applicable
14. Compliance Report and Plan: <input type="checkbox"/> Attached, Document ID:_____ <input checked="" type="checkbox"/> Not Applicable
15. Compliance Certification (Hard-copy Required): <input type="checkbox"/> Attached, Document ID:_____ <input checked="" type="checkbox"/> Not Applicable

III. EMISSIONS UNIT INFORMATION

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

**A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)**

Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input type="checkbox"/> 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).</p> <p><input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.</p> <p><input type="checkbox"/> 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.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):</p> <p>Six (6) gas fired lead refining kettles and pouring ladles on casting machines.</p>			
<p>4. Emissions Unit Identification Number: ID: 002</p>		<p><input type="checkbox"/> No ID <input type="checkbox"/> ID Unknown</p>	
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date:</p>	<p>7. Emissions Unit Major Group SIC Code: 33</p>	<p>8. Acid Rain Unit? <input type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p> <p>The existing three 52-ton kettles (56-ton total charge) will be replaced by six new 78-ton kettles (86-ton total charge).</p>			

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

A four-module shaker-type Baghouse with teflon-on-acrylic bags controlling particulate and lead emissions off the kettle hoods and pouring ladles on casting machines.

(Indirect gas combustion exhausted through separate stacks)

2. Control Device or Method Code(s): 018

Emissions Unit Details

1. Package Unit:		
Manufacturer:		Model Number:
2. Generator Nameplate Rating:		MW
3. Incinerator Information:		
	Dwell Temperature:	°F
	Dwell Time:	seconds
	Incinerator Afterburner Temperature:	°F

**B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)**

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	25.2	mmBtu/hr
2. Maximum Incineration Rate:	N/A	lb/hr tons/day
3. Maximum Process or Throughput Rate:	32,000 T/Yr	
4. Maximum Production Rate:	86 tons/charge (Each Kettle)	**
5. Requested Maximum Operating Schedule:		
	24 hours/day	7 days/week
	52 weeks/year	8760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):		
<p>¹ The maximum heat input rate shown is the total for all six kettles. Each kettle is 4.2 mm Btu/hr. The products of combustion for the indirect fired kettles are exhausted through separate flues than the kettle hoods.</p>		

**D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)**

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram?		2. Emission Point Type Code: 3	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): <ul style="list-style-type: none"> • Baghouse exhaust stack controlling kettle hoods • Four separate stack exhausting indirect gas combustion emissions 			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: 002 Hood Exhaust for six (6) gas fired refining kettles and pouring ladles on casting machines.			
5. Discharge Type Code: V	6. Stack Height: 60.5 feet	7. Exit Diameter: 3.0 feet	
8. Exit Temperature: 98 °F	9. Actual Volumetric Flow Rate: 30,000 acfm	10. Water Vapor: 2.0 % EST.	
11. Maximum Dry Standard Flow Rate: 27,820 dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):			
14. Emission Point Comment (limit to 200 characters): NOTE: The burner products of combustion are not exhausted through this stack.			

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/ Fuel Type) (limit to 500 characters): Natural gas used in refining kettle heaters		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate: 25,200 ft ³ (Gas)	5. Maximum Annual Rate: 221 MM ft ³ (Gas)	6. Estimated Annual Activity Factor: 0.45
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit: 1,000 btu/CF
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Sodium Nitrate (NaNO ₃) refining material		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate: 360,000 lb/yr NaNO ₃	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: N/A	8. Maximum % Ash: N/A	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control: +99%
3. Potential Emissions: 1.19 lb/hour 5.2 tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: 0.005 gr/dscf Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters): $\frac{(0.005 \text{ gr/dscf}) (27,800 \text{ scfm}) (60 \text{ min/hr})}{7000 \text{ gr/dscf}} = 1.19 \text{ lb/hr}$ and $(1.19 \text{ lb/hr}) (8760 \text{ hrs/yr}) / (2000 \text{ lb/T}) = 5.2 \text{ T/yr}$	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 1.19 lb/hr	4. Equivalent Allowable Emissions: 1.19 lb/hour 5.2 tons/year
5. Method of Compliance (limit to 60 characters): Annual compliance testing using EPA Method 5	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

**G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)**

Potential/Fugitive Emissions

1. Pollutant Emitted: NO _x		2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour 28.8 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year			
6. Emission Factor: 0.16 lb/lb NaNO ₃ for NaNO ₃ Reference: AP-42 5 th Ed. For Natural Gas		7. Emissions Method Code: 3, 5	
8. Calculation of Emissions (limit to 600 characters): 360,000 lb NaNO ₃ /yr x 0.16 lb/lb NaNO ₃ x 1 Ton/2000 lb = 28.8 ton/yr * This is NO _x through kettle hood stack only; does not include products of combustion.			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 28.8 T/yr		4. Equivalent Allowable Emissions: N/A lb/ 28.8 tons/year	
5. Method of Compliance (limit to 60 characters): Monthly NaNO ₃ usage and source specific emission factor			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

**J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)**

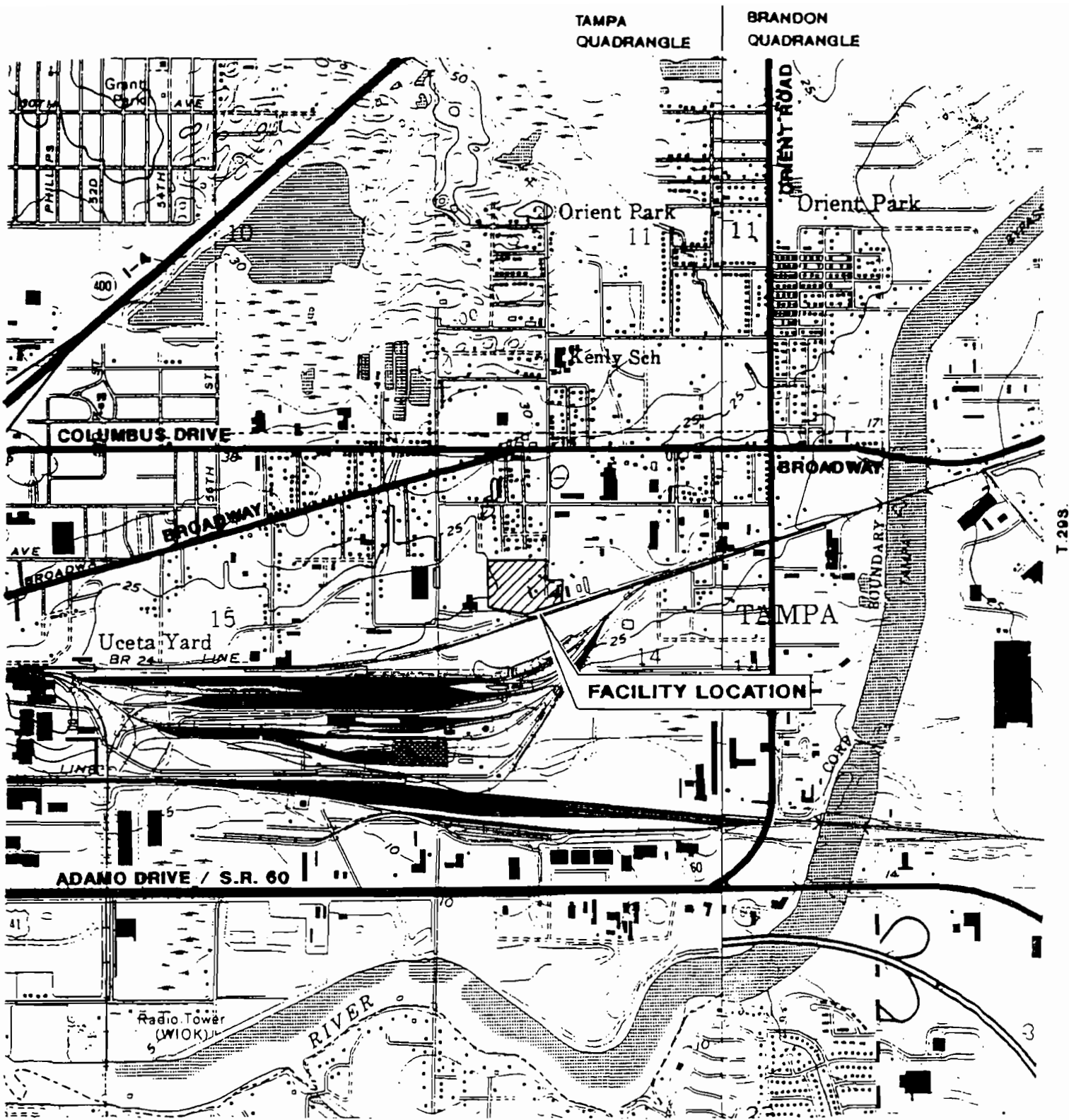
Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: _____ [] Not Applicable [] Waiver Requested
2. Fuel Analysis or Specification <input type="checkbox"/> Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: <u>See Item</u> [X] Not Applicable [] Waiver Requested 10 Below
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ [] Not Applicable [X] Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Previously submitted, Date: _____ <input checked="" type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input checked="" type="checkbox"/> Attached, Document ID: _____ [] Not Applicable [] Waiver Requested
7. Operation and Maintenance Plan <input checked="" type="checkbox"/> Attached, Document ID: _____ [] Not Applicable [] Waiver Requested
8. Supplemental Information for Construction Permit Application <input type="checkbox"/> Attached, Document ID: _____ [X] Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment: <p align="center">Existing baghouse to be replaced with 4 module baghouse, larger fan and new stack.</p>

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
14. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
15. Acid Rain Part Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____ <input type="checkbox"/> Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable

ATTACHMENT A
Facility Location



T. 298

SOURCE: USGS 7.5 MINUTE QUADRANGLES
 TAMPA 1981
 BRANDON 1987

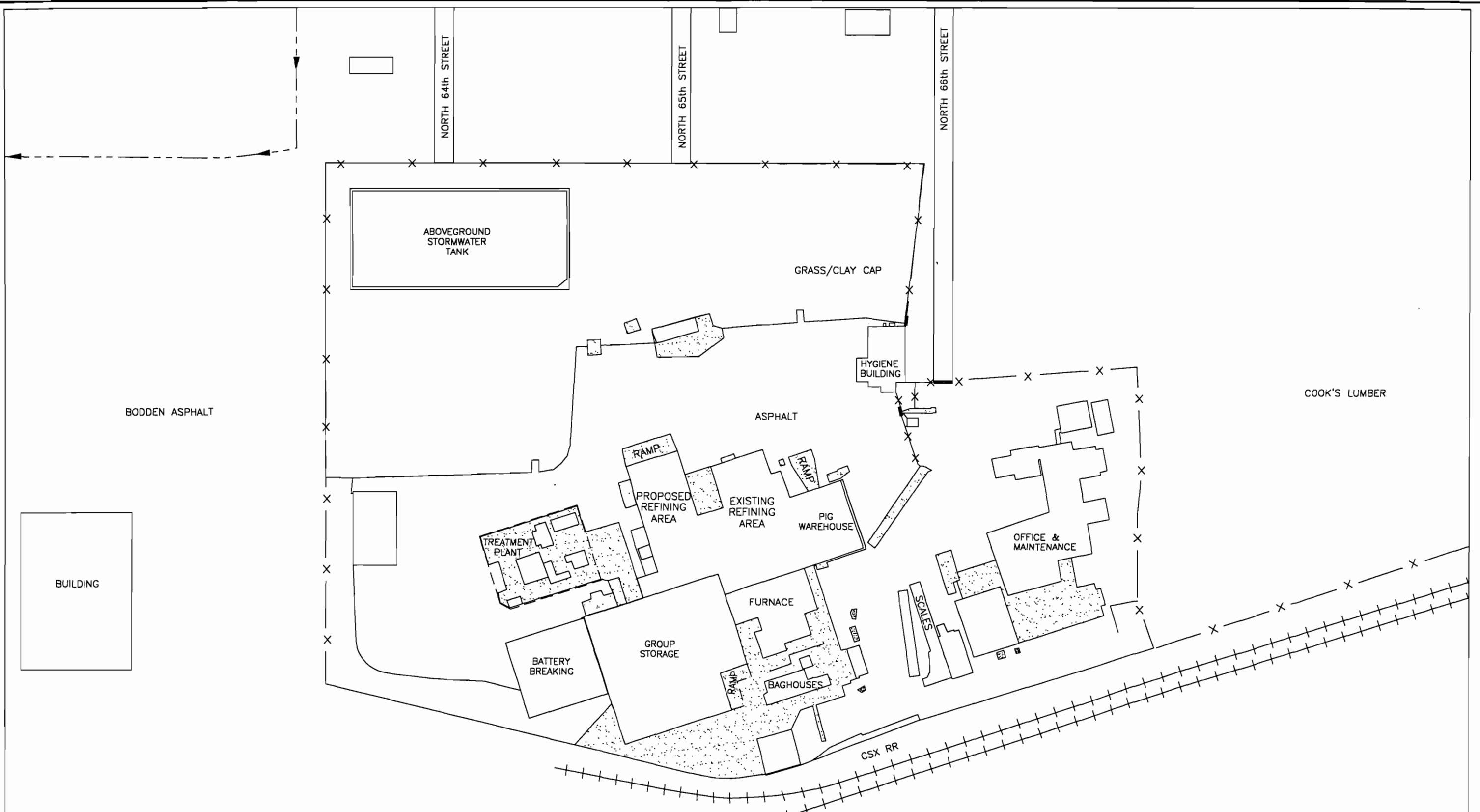
R. 19E.

CONTOUR INTERVAL 5 FEET
 NATIONAL GEODETIC VERTICAL DATUM OF 1929



GULF COAST RECYCLING, INC.
 Facility Location

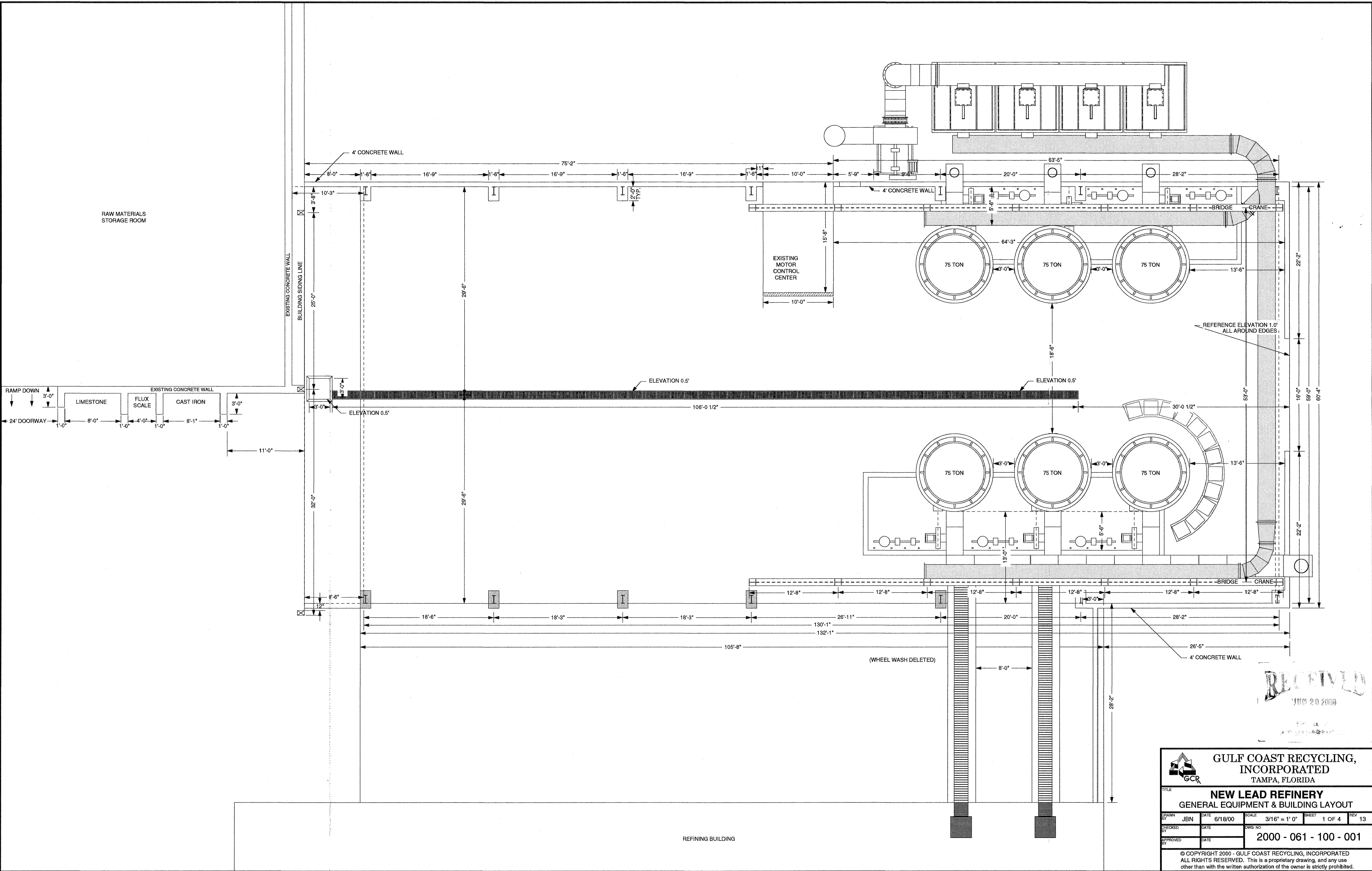
ATTACHMENT B
Facility Plot Plan




- LEGEND**
- CONCRETE
 - ++++ RAILROAD
 - X- FENCE
 - - - DITCH WITH FLOW DIRECTION



<p>GULF COAST RECYCLING, INC</p> <p>1211 Tech Blvd. Suite 200 Tampa, Florida 33619 (813) 623-6646</p>	<p>DATE 6/27/00</p> <p>JOB NO. 2148P</p> <p>PLATE NO. 1</p>	<p>SITE LAYOUT</p> <p>TAMPA, FL</p>
---	---	--



RECEIVED
 APR 20 2000

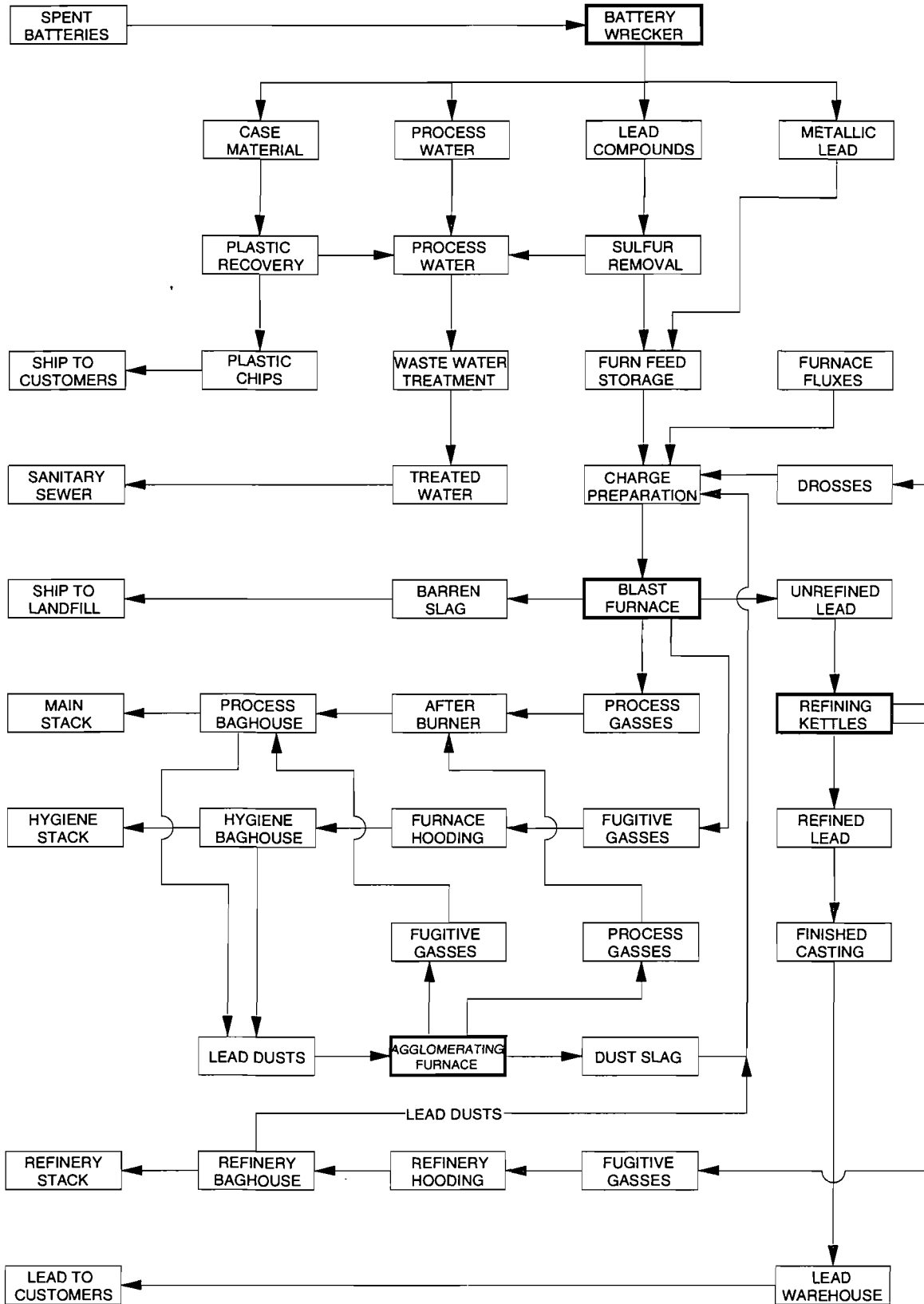
		GULF COAST RECYCLING, INCORPORATED TAMPA, FLORIDA	
NEW LEAD REFINERY GENERAL EQUIPMENT & BUILDING LAYOUT			
DRAWN BY JBN	DATE 6/18/00	SCALE 3/16" = 1' 0"	SHEET 1 OF 4
CHECKED BY	DATE	DWG NO.	REV 13
APPROVED BY	DATE	2000 - 061 - 100 - 001	
<small>© COPYRIGHT 2000 - GULF COAST RECYCLING, INCORPORATED ALL RIGHTS RESERVED. This is a proprietary drawing, and any use other than with the written authorization of the owner is strictly prohibited.</small>			

REFINING BUILDING

ATTACHMENT C
Process Flow Diagram

GULF COAST RECYCLING, INC.

PROCESS FLOWCHART



ATTACHMENT D
Standard Operating Procedures
For The Control of Fugitive Emissions

**STANDARD OPERATING PROCEDURES
FOR THE CONTROL OF FUGITIVE EMISSIONS**

**GULF COAST RECYCLING, INC.
1901 NORTH 66th STREET
TAMPA, FL 33619**

REVISED MAY 3, 1999

Introduction

Gulf Coast Recycling, Inc. (GCR) is a secondary lead smelter. The facility processes spent lead acid batteries. Battery components are separated and the lead bearing materials are smelted in a blast furnace rendering a product known as blast lead. The blast lead is further refined to produce specific grades of lead for the manufacture of new batteries.

The facility has a Blast Furnace Operation, Refining Operation, Slag Fixation Operation, Battery Breaking/Recycling Operation, and a Materials Storage and Handling Area for lead bearing materials.

GCR is committed to the operation of its facility in a manner which will comply with applicable federal, state, and county environmental regulations and in harmony with the surrounding community. GCR has operated at its present location for more than thirty five (35) years and expects to continue operation well into the next century. Regulatory compliance is a corporate commitment. This commitment is vigorously reinforced throughout the company; from the top down.

Purpose

The purpose of this plan is to maintain effective fugitive controls to meet the requirements of the U.S. Environmental Protection Agency (EPA), the Florida Department of Environmental Protection (FDEP), and the Environmental Protection Commission of Hillsborough County (EPC).

The EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) From Secondary Lead Smelting (40 CFR 63 Subpart X) apply to this facility. This rule requires the owner to prepare and operate in accordance with a standard operating procedures (SOP) manual that describes the measures used to control fugitive emissions at the facility. The NESHAP requirements are also referred to as EPA Maximum Achievable Control Technology (MACT) standards for secondary lead smelters.

FDEP rule 62-296.601 requires lead processing operations located within lead non-attainment or maintenance areas to employ reasonably available control technology (RACT) to control potential fugitive emissions at the facility. The RACT rule addresses measures that apply to areas and activities that are not addressed by the MACT rule or are more stringent than the MACT requirements. These measures are also covered in this SOP. Additionally, GCR entered into a Consent Order (CO), case No. 95-0728SKW057, with the EPC which has specific requirements which are also incorporated into this SOP manual.

The EPC is the administrator of the aforementioned EPA and FDEP regulations and is authorized to issue facility construction and operation permits. All of the NESHAP, MACT, RACT and CO requirements will be incorporated as specific conditions into an air

construction permit to be issued by the County to GCR. This SOP manual will also be incorporated, by reference, as a specific condition.

Potential sources of fugitive emissions at the facility include:

- (1) Plant Roadways and Parking Areas
- (2) Battery Recycling (battery breaking)
- (3) Blast Furnace Area
- (4) Refining and Casting Area
- (5) Materials Storage and Handling Area (Group Pile)
- (6) Slag Fixation Operation
- (7) Unpaved Outside Areas

Operating Procedures

The following procedures will be used at GCR, at a minimum, for the control of fugitive emissions:

Plant Roadways

Vehicular traffic areas are all paved and are periodically wetted down by a ten zone (see attached plot plan) automatic sprinkler system. Each zone is setup with a timer and control valve that cycles the zone on several times a day. The timers are electronic programmable timers in lockable plastic cases. Sprinkler operation will be noted on the Sprinkler Operation Log sheet (see Attachment 1). The sprinkler zones and cycles are as follows:

<u>Zone</u>	<u>Location</u>	<u>On/Off Time</u>
1	Office Parking Lot Fence	10 Min./80 Min.
2	Maintenance Shop/Roofed Parking Area, Front Gate, and Hygiene Building	10 Min./80 Min.
3	Refining, Pig Warehouse and N.E. Corner of Furnace	10 Min./80 Min.

4	Furnace Baghouses	10 Min./80 Min.
5	S.E. Wall Section	10 Min./80 Min.
6	S.W. Wall Section	10 Min./80 Min.
7	Waste Water Treatment Plant	10 Min./80 Min.
8	West Pavement Perimeter	10 Min./80 Min.
9	Northwest Pavement Perimeter	10 Min./80 Min.
10	Old Battery Saw Area	10 Min./80 Min.

As indicated above, zone 1 and zone 7 will cycle on for ten (10) minutes and off for eighty (80) minutes, independently, on a daily basis. The remaining zones will operate as follows:

Zones 2 & 3 on simultaneously - 10 minutes
(Note: Zones 2 & 3 are on the same timer)

5 Minute Delay

Zones 4 & 9 on simultaneously - 10 minutes

5 Minute Delay

Zones 5 & 10 on simultaneously - 10 minutes

5 Minute Delay

Zones 6 & 8 on simultaneously - 10 minutes

5 Minute Delay

Zone 7 on 10 - minutes

5 Minute Delay

There is approximately five (5) minutes between the cycling of each zone(s).

The single impulse sprinkler at the plant entrance gate and the two impulse sprinklers on the hygiene building will operate automatically with zone 2 and zone 3 sprinklers.

Number and type of sprinklers in use:

<u>Zone</u>	<u>Location</u>	<u>Quantity & Type</u>
1	Office Parking Lot Fence	13 Spray Heads
2	Maintenance Shop/Roofed Parking Area	5 Impulse Heads
3	Refining, Pig Warehouse and N.E. Corner of Furnace	7 Impulse Heads
4	Furnace Baghouses	5 Impulse Heads
5	S.E. Wall Section	11 Spray Heads
6	S.W. Wall Section	16 Spray Heads
7	Waste Water Treatment Plant	5 Impulse Heads
8	West Pavement Perimeter	7 Impulse Heads
9	Northwest Pavement Perimeter	6 Impulse Heads
10	Old Battery Saw Area	2 Impulse Heads

Traffic paths shall be vacuumed three (3) times each day with a Tennant ,or equivalent, vacuum sweeper except when rain occurs or when areas are sufficiently wetted by the pavement sprinkler system. The employee parking lots will be vacuumed three (3) times a week, unless prohibited by prolonged periods of rain fall. Sweeper operation will be noted on the Sweeper Operation Log sheet (see Attachment 2). Several sprinkler zones cycle on and off automatically throughout the day which keep the plant traffic paths wet.

Battery Breaking Area

This area is partially enclosed with walls on all four sides. The walls extend down from the roof line to approximately ten (10) feet from the top of the curbing that is around the entire floor area. Approximately three quarters of the east wall is directly adjacent to the west wall of the materials storage and handling area which provides a wall from the roof to the floor. Any wash down water or process water from the operation gravity flows to a collection sump on the north side of the building. Water collected in the sump is pumped to the on-site waste water treatment plant for treatment. The battery breaking area will be washed/hosed down at least twice a day. Each wash down will be noted on the daily operation log sheet and signed by the operator (see Attachment 3).

Blast Furnace Area

The blast furnace area is partially enclosed with walls on the south, east and west side that extend down from the roof to approximately fourteen (14') feet from the floor. The wall on the north side is shared with the refining area and extends down to the floor. The furnace is bordered on the south by the baghouses which are walled in and is bordered on the west (approximately 30 feet away) by the materials storage and handling area building. The furnace work area will be washed/hosed down at least twice a day; a minimum of once during two of the three shifts. Each wash down will be noted on the shift operation log sheet and signed by the operator (see Attachment 4). The wash down water in the furnace area gravity flows to one of two floor sumps. The sumps are located on the east and west sides of the blast furnace area. Water collected in these sumps will be pumped to the waste water treatment plant for treatment.

Potential process fugitive emissions in the blast furnace operation are controlled by two enclosures and two hoods that are vented to three baghouses. The blast furnace slag tapping enclosure, lead tapping hood, and dust agglomeration furnace slag tapping enclosure are vented to one baghouse. The blast furnace charging hood is vented to two baghouses. The openings or faces of these hoods and enclosures will meet the 300 feet per minute face velocity requirements while access doors are in the normal operating position.

Refining Area

The refining area is partially enclosed. The south wall extends from the roof to the floor. A portion of the east and west walls extend from the roof to the floor. The pig warehouse directly east and adjacent to the refining area essentially provides a wall for two thirds of the east side of the refining area. This area is bordered on the west by the old battery saw area which is roofed and the tanks and concrete structures provides additional wind breaks to the west of the refining area. The work area will be washed/hosed down at least twice a day. Each wash down will be noted on the daily operation log sheet and signed by the operator (see Attachment 5). Wash down water in the refining area is collected in a floor sump near the northwest corner of the area. Wash down water collected in the sump is pumped to the waste water treatment plant for treatment.

Potential process fugitive emissions in the refining operation are controlled by hoods over each of the three refining kettles and three dressing enclosures. The hoods and enclosures are vented to two baghouses. The kettle hoods will meet the 250 feet per minute face velocity requirement while the doors are in their normal operating position. The dressing enclosures will meet the 300 feet per minute face velocity requirement while the doors are in their normal operating position.

Molten lead is pumped from the kettles to one of two casting machines. A pre-set amount of lead is delivered to the pig molds through a star ladle at the front end of the casting machines. The star ladle is kept hot with a gas flame. A hood will be constructed over the

star ladle to capture potential emissions. The face of the hood will meet the 300 feet per minute face velocity requirement.

Slag Fixation

This operation is enclosed with walls on all four sides that extend from the roof to the floor. The north wall has a roll-up garage door, approximately 14' X 14', for equipment access. There is a walk-in door on the west side. This area will be swept or washed down at the end of the operating day. Each floor cleaning will be noted on the daily operation log sheet and signed by the operator (see Attachment 6). There are two floor sumps in the building, one on the east side and one on the west side. Wash down water collected in the sumps is pumped to the waste water treatment plant for treatment.

Potential fugitive emissions in the slag fixation operation are controlled by a single baghouse. There are pick-up points on the slag crusher outlet, sizing screen, and the mixer inlet. All doors are kept closed during the slag crushing and fixation operation. Therefore, the in-draft requirement for doors open during normal operation is not applicable.

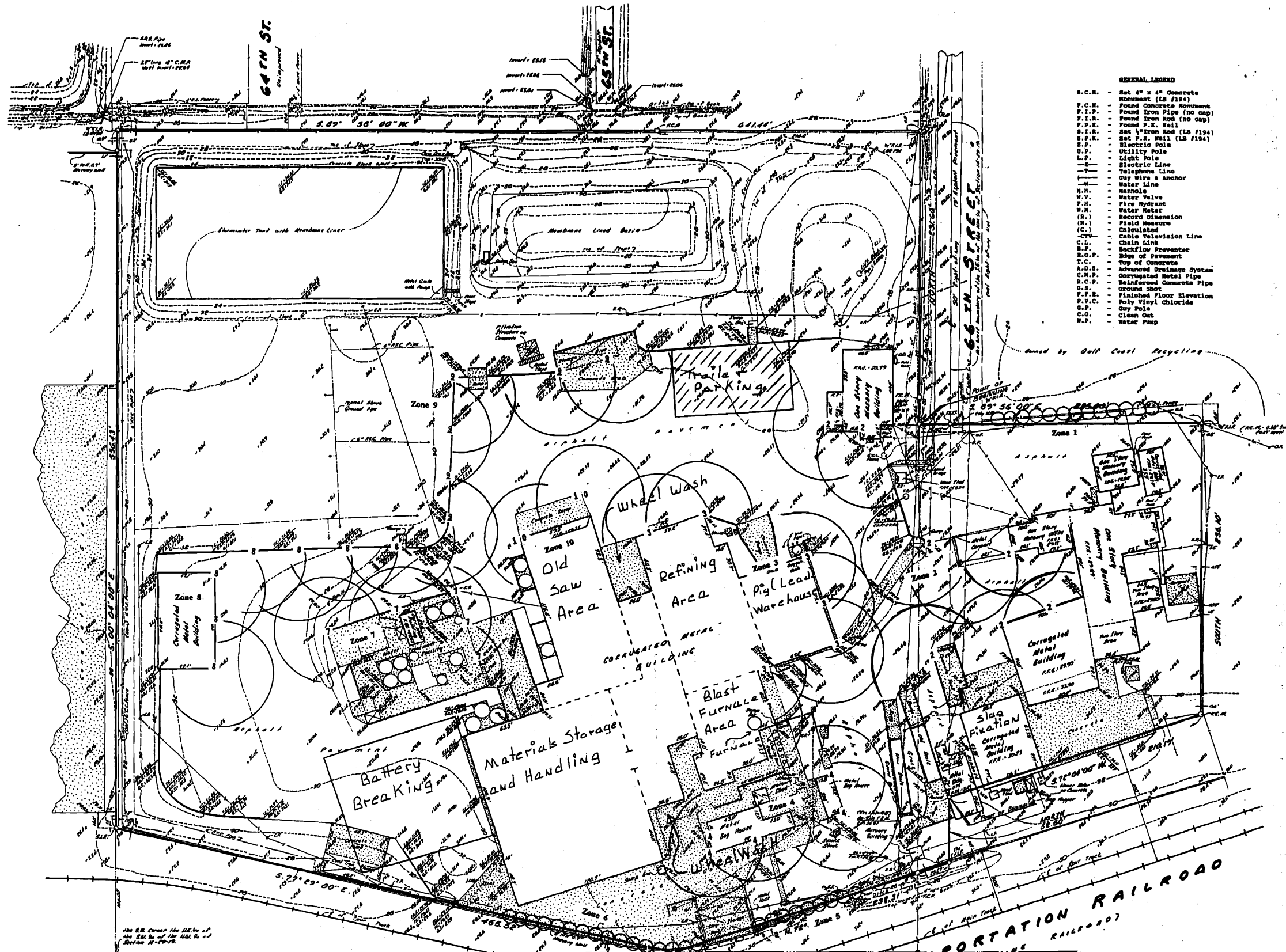
Materials Storage and Handling Area

The materials storage and handling area has walls from the roof to the floor on all four sides. There is an approximately 24' X 14' equipment access opening on the west side of the area. There is an approximately 12' X 13' loading/unloading ramp access opening on the north side of the area. Accumulated water in this area gravity flows to one of two floor sumps. There is a collection sump on the east wall near the southeast corner of the area and one sump on the north side of the area. Water collected in the east sump is pumped to the waste water treatment plant for treatment. Water collected in the north sump will be pumped to the desulfurization reactor(s) or to the waste water treatment plant for treatment. The pathways within this area will be wetted down as needed to prevent the generation of dust. The materials stored in this area are washed/wetted prior to storage and will remain moist even after long term storage. Additional wetting of the stored material will be provided, as needed, to prevent the generation of dust (see Attachment 7).

The main entrance/exit to the materials storage and handling area is under a contiguous roof that provides covered access for equipment moving between the materials storage and handling, blast furnace and refining areas. An employee is stationed at this location for the sole purpose of pressure washing any equipment (forklift, front-end loader) that will be leaving the roofed area. The washing of the equipment will be documented on a log (see Attachment 8).

The activities described above will be documented on a separate log sheet or the daily operating log kept for each process operation (see attached forms).

SECTION 14, TOWNSHIP 29 SOUTH, RANGE 19 EAST, CITY OF TAMPA, FLORIDA



- GENERAL LEGEND**
- S.C.M. - Set 4" x 4" Concrete Monument (LS #194)
 - F.C.M. - Found Concrete Monument
 - F.I.P. - Found Iron Pipe (no cap)
 - F.I.R. - Found Iron Rod (no cap)
 - F.P.K. - Found P.K. Nail
 - C.I.R. - Set Iron Rod (LS #194)
 - S.P.R. - Set P.R. Nail (LS #194)
 - E.P. - Electric Pole
 - U.P. - Utility Pole
 - L.P. - Light Pole
 - E. - Electric Line
 - T.L. - Telephone Line
 - G.W. - Guy Wire & Anchor
 - W. - Water Line
 - N.H. - Manhole
 - W.V. - Water Valve
 - F.H. - Fire Hydrant
 - W.W. - Water Meter
 - R.D. - Record Dissection
 - (N.) - Field Measure
 - (C.) - Calculated
 - C.T.L. - Cable Television Line
 - C.L. - Chain Link
 - S.P. - Backflow Preventer
 - S.O.P. - Stop of Pavement
 - T.C. - Top of Concrete
 - A.D.S. - Advanced Drainage System
 - C.M.P. - Corrugated Metal Pipe
 - R.C.P. - Reinforced Concrete Pipe
 - G.S. - Ground Shot
 - F.P. - Finished Floor Elevation
 - P.V.C. - Poly Vinyl Chloride
 - G.P. - Guy Pole
 - C.O. - Clean Out
 - W.P. - Water Pump

LEGAL DESCRIPTION:

Part of the Northwest 1/4 of the Southwest 1/4 of the Northwest 1/4 of Section 14, Township 29 South, Range 19 East, Hillsborough County, Florida, described as follows: From the Southeast corner of the Southwest 1/4 of the Northwest 1/4 Section 14, run South 89° 58' West along the North boundary of said Northwest 1/4 of the Northwest 1/4 of Section 14 a distance of 25.0 feet to a point-of-beginning on the West right-of-way line of 64th Street; from said point-of-beginning, continue South 89° 58' West along the North boundary of said Northwest 1/4 of the Northwest 1/4 of Section 14, a distance of 441.44 feet to the Northwest corner of the Northwest 1/4 of the Southwest 1/4 of the Northwest 1/4 of Section 14; run thence South 0° 04' East along the West boundary of said Northwest 1/4 of the Northwest 1/4 of the Southwest 1/4 of the Northwest 1/4 of Section 14 a distance of 231.1 feet to a point which is 100.0 feet North of the Southwest corner of said Northwest 1/4 of the Northwest 1/4 of the Southwest 1/4 of Section 14, which point is 441.7 feet East of the Southeast corner of said Northwest 1/4 of the Northwest 1/4 of the Southwest 1/4 of Section 14; run thence North 72° 04' East along the Northerly right-of-way line of Atlantic Coast Line Railroad a distance of 322.11 feet to intersection with the East boundary of said Northwest 1/4 of the Southwest 1/4 of the Northwest 1/4 of Section 14; run thence North along said East boundary of the Northwest 1/4 of the Southwest 1/4 of the Northwest 1/4 of Section 14 a distance of 231.5 feet to a point on the North right-of-way line of Atlantic Coast Line Railroad; run thence North 89° 58' West a distance of 25.0 feet; run thence North along the West right-of-way line of 64th Street a distance of 231.66 feet to the point-of-beginning.

AND:

Part of the Southeast 1/4 of the Northwest 1/4 of Section 14, Township 29 South, Range 19 East, Hillsborough County, Florida, described as follows: From the point-of-beginning which is the intersection of the West boundary of said Southeast 1/4 of the Northwest 1/4 of Section 14 and the Northerly right-of-way line of Atlantic Coast Line Railroad, which point is 100.0 feet Northerly (measured at right angles) from the centerline of said railroad, run North along said West boundary of the Southeast 1/4 of the Northwest 1/4 of Section 14 a distance of 200.0 feet; run thence South 89° 58' East (measured) a distance of 200.0 feet; run thence South, parallel to the West boundary of said Southeast 1/4 of the Northwest 1/4 of Section 14, a distance of 231.1 feet to a point on the North right-of-way line of Atlantic Coast Line Railroad; run thence South 72° 04' West along said North right-of-way line of Atlantic Coast Line Railroad a distance of 210.19 feet to the point-of-beginning.

- ADDITIONAL NOTES:**
1. No underground foundations, structures, installations or improvements have been located unless otherwise shown hereon.
 2. See legend for symbols and/or abbreviations used hereon.
 3. This survey is NOT VALID UNLESS SIGNED WITH SURVEYORS SEAL and was prepared for the exclusive use of the current owners and also those who purchase, mortgage or guarantee the title thereto and/or others whose names appear on the face of this survey.
 4. This parcel located in Flood Zone "A" as per the Flood Insurance Rate Map for the City of Tampa, Florida, Community Panel Number 2200, dated 10/21/82. Base flood elevation, if applicable, is _____ feet. Elevation datum is S.G.V.D.-79, unless otherwise shown.
 5. This survey prepared without the benefit of a title search. No instruments of record reflecting ownership, easements or rights of way were furnished to the undersigned, unless otherwise shown hereon.
 6. Elevations shown hereon are in feet and refer to S.G.V.D. - 79 Datum. Reference Benchmark is City of Tampa Circuit No. 22 Benchmark No. 4218. Elevation = 29.721
 7. On-site temporary benchmark is "O" cut set on the S.W. corner of New Truck Scale located 110' N. and 14' W. of the S.E. corner of the E. 1/2 of the S.W. 1/4 of the N.W. 1/4 of Section 14-29-19. Elevation = 30.21 (See Sketch)

The S.E. Corner of the N.E. 1/4 of the S.W. 1/4 of the S.W. 1/4 of Section 14-29-19.

The S.E. Corner of the N.E. 1/4 of the S.W. 1/4 of the S.W. 1/4 of Section 14-29-19.

CERTIFICATE:

This certifies that the property described hereon was surveyed under my direction and supervision, that the sketch hereon is a true and accurate representation of the same, and that this survey meets the minimum technical standards of Chapter 21 HB-6, Florida Administrative Code, to the best of my knowledge and belief. I find no encroachments except as shown hereon.

DATE OF SURVEY: 12-01-93

DATE OF SURVEY: 12-01-93

DATE OF SURVEY: 12-01-93

PMM-WOODS ENGINEERING CO.
CIVIL ENGINEERS-LAND SURVEYORS
1908 NORTH FLORIDA AVENUE-TAMPA, FLORIDA-33602-1801 888-7747

SCALE: 1"=40'	NOT VALID UNLESS EMBOSSED WITH SURVEYORS SEAL	18 NOV. 03
BY: [Signature]	DATE: [Signature]	PL: 39-53
BOUNDARY SURVEY With Elevation And Occupation		
FOR: Gulf Coast Recycling, Inc.	PROJECT NUMBER: 9333-005	
REVISION	DATE	REMARKS
D.C.S.	11-18-93	Added Fire Hydrant
D.C.S.	12-01-93	Remove Floor Surface
D.C.S.	01-1-94	Added Corridor Lines

Sprinkler Operation Log

Month: _____

Year: _____

Day	By	Sprinkler Zones In Operation									
		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No. 10
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											

If a sprinkler or a zone is inoperable, please note the inoperable zone and the measures taken to effect the repairs and/or replacements needed. Document the date of the repairs.

Sprinkler Operation Log

Month: _____

Year: _____

Day	By	Sprinkler Zones In Operation									
		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	No. 9	No. 10
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											

If a sprinkler or a zone is inoperable, please note the inoperable zone and the measures taken to effect the repairs and/or replacements needed. Document the date of the repairs.

Attachment 2

Sweeper Operation Log

Date: _____

Operator	Start Time	Hour Meter Reading		Operation Time	Area(s) Swept
		Start	End		

Area(s) Swept: (1) Plant Roadways, (2) Office Parking Lot, (3) Safety Office Parking Lot

Under areas swept, list by number the areas swept each time the sweeper is operated. The plant roadways must be swept a minimum of three times each day. The parking lots must be swept a minimum of three time per week.

Engine Air Filter: Check Indicator _____ Empty Dust Cap _____

Engine Crankcase: Check Oil Level _____

Brush Compartment Skirt: Check For Damage & Wear _____
Adjustments Made: _____ (Yes or NO)

Hopper Lip Skirts: Check For Damage & Wear _____
Adjustments Made: _____ (Yes or NO)

Main Brush: Check For Damage & Wear _____
Adjustments Made: _____ (Yes or NO)

Hopper Dust Filters: Condition of Filters _____
Filters Changed _____ (Yes or No)
Filter Screens Changed _____ (Yes or No)

- 1.) Operators must sign the log sheet each time the sweeper is used.
- 2.) Shake the hopper filters approximately every fifteen minutes.

Notes: _____

Attachment 3

Battery Breaking Operation

Date: _____

Operator: _____

<u>Start Time</u>	<u>End Time</u>	<u>Run Time</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Remote Conveyor Panel Hour Meter: (Read Daily)

Start: _____ Hours End: _____ Hours

Processing Time: _____ Hours Pallets Processed: _____

Dehumidifier Magnehelic Readings: Inlet _____ "H2O Outlet: _____ "H2O

Soda Ash Silo Panel Hour Meter: (Read Daily)

Start: _____ Hours End: _____ Hours

Soda Ash Delivery: _____ (Yes or No)

Soda Ash Silo Level: Start _____ Ft. End _____ Ft.

Floor Wash Downs:

1. _____ Time: _____ Signature: _____

2. _____ Time: _____ Signature: _____

3. _____ Time: _____ Signature: _____

Floor Must be washed down at least twice each day.

Notes: _____

Daily Blast Furnace Operation Process Sheet

Date: _____ Shift: _____ Operator: _____ Start Time: _____

No.	Time	Tag No.		1	2	3	4	5	6	7	8
1			1 1/2 Coke								
2			Return Slag								
3			Iron 135, Lime 135								
4											
5			2 Groups								
6											
7			3 Groups								
8											
9			4 1/2 Coke								
10											
11			5 Groups								
12			Iron 135, Lime 135								
13											
14			6 1/2 Coke								
15											
16			7 Groups								
			8 Groups								

Furnace Area Wash Downs

1. Time: _____ Signed: _____
 2. Time: _____ Signed: _____
 3. Time: _____ Signed: _____

Area must be washed down at least once each shift

Slag Pull Times:

Dust Slag Pots:

Equipment & Furnace Checks:

Furnace
Bucket
Tweers Open
Pipes Cleaned
Scale
Torch
Pressure Washer

Baghouse Differential Pressure Readings						
3)	4)	5)	6)	7)	8)	
9)	10)	11)	12)	H1)	H2)	H3)

Baghouse Inlet Temp. Degrees F: _____

Attachment 5

Daily Refining Operation Process Sheet

Date: _____ Operator: _____

	Pot No. 1	Pot No. 2	Pot No. 3
Type Lead			
Preparation Time	Start	Start	Start
	Finish	Finish	Finish
Pumping Time	Start	Start	Start
	Finish	Finish	Finish
Total Hours			

Blast Lead Buttons Used: _____ Average Weight Each : _____ Lbs.

Finished Pigs Produced: _____ Average Weight Each : _____ Lbs.

Finished 1/2 Pigs Produced: _____ Average Weight Each : _____ Lbs.

Refining Materials Used: _____ Recycled Pigs or Scrap Lead: _____ Lbs.

Arsenic [] _____ Lbs. Sodium Hydroxide [] _____ Lbs.

Antimony [] _____ Lbs. Red Phosphorous [] _____ Lbs.

Aluminum [] _____ Lbs. Sodium Nitrate [] _____ Lbs.

Sulfur [] _____ Lbs. Calcium [] _____ Lbs.

Tin [] _____ Lbs. Selenium [] _____ Lbs.

Drosses Removed: Tin _____ Lbs. Antimony _____ Lbs. Misc. _____ Lbs.

Final Saw Dust Wash: _____ Shovels Used

Baghouse Differential Pressure Readings R1: _____ "H2O R2: _____ "H2O

Emission Control System Inspection (Baghouses, Fan, Duct Work & Hoods): OK []

Stack Observed: _____

Floor Wash Downs: Floor area must be washed down at least twice day

1 _____ Time: _____ Signed: _____

2 _____ Time: _____ Signed: _____

3 _____ Time: _____ Signed: _____

Attachment 6

Slag Fixation Batch Sheet

Date: _____ Batch No.: _____

Batch Start Time: _____ Batch End Time: _____

Run Time: _____ Hours _____ Minutes

Batch Material Inputs:

_____ Tons _____ TPH

Crushed Slag: _____ Lbs. _____

Gallons of Water: _____ Lbs.

Enviroblend: _____ Lbs.

Totals _____ Lbs. _____ Tons

Composite Sample No.: _____ Sample Date: _____
(Batches BCH _____ & BCH _____)

Sample Time: _____

Sampled By: _____

Sample Submitted To _____ Date: _____

Laboratory Results - TCLP Lead _____ ppm

Time: _____

Crusher Checks During Run: Inlet :

Outlet:

Crusher On Time: _____ Crusher Off Time : _____

Crusher Operating Time: _____

Baghouse Delta P Reading: _____ "H2O

Floor Cleaned _____ Time: _____ Signed: _____

Comments: _____