

Date: 4/13/98 10:10:15 AM
From: John Reynolds TAL
Subject: Gulf Coast Recycling
To: Alvaro Linero TAL

Spoke with Jerry Campbell this morning and the news on "Gold Coast" isn't very good. The desulfurization system failed to meet the expected performance, so GCR has employed Steve Smallwood to try and sell Jerry on the same approach they tried with BAR (i.e., "we need a higher SO2 limit").

I view this as a breach of the agreement with GCR that they would install the additional repulping step (advanced desulfurization) if the basic desulfurization did not achieve 75% sulfur removal. Looks like it's time for another "Tarmac"-type resolution. You agree?

Jerry wants to talk with you and me on Thursday @ 10:00 a.m. since he is meeting with Smallwood that afternoon.

COMMISSION

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CHRIS HART
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THOMAS SCOTT
ED TURANCHIK

EXECUTIVE DIRECTOR

ROGER P. STEWART



ADMINISTRATIVE OFFICES, LEGAL &
WATER MANAGEMENT DIVISION
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TAMPA, FLORIDA 33605
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FAX (813) 272-5157

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TELEPHONE (813) 272-5530

WASTE MANAGEMENT DIVISION
TELEPHONE (813) 272-5788

WETLANDS MANAGEMENT DIVISION
TELEPHONE (813) 272-7104

MEMORANDUM

DATE: March 31, 1998
TO: Al Linero
FROM: Jerry Campbell *JC*
SUBJECT: Gulf Coast Recycling (GCR)

RECEIVED

APR 03 1998

BUREAU OF
AIR REGULATION

You recall EPC took over the GCR construction application last summer when it was agreed we could issue them a non-PSD permit. Attached is a copy of the revised Intent-to-Issue we mailed to GCR this week. Through out recent discussions with John Reynolds, we believe this Intent contains the specifics that the DEP felt were necessary to keep GCR out of PSD. In fact, it is really a compilation of what GCR agreed to all along. Unfortunately, they are now telling us the desulfurization system is not meeting expectations and they want the SO₂ standard changed.

We have granted them an extension of time to file for an administrative hearing until May 13. Sometime before that they have promised to offer a counterproposal and we expect it to include a substantially higher SO₂ number. At some point, our Executive Director will have to decide whether EPC should take this to a 120 hearing. Before we get that far, we would like to meet with you and ensure the DEP and EPC are in agreement on any outstanding issues. If your travels are bringing you to Central Florida any time in April, perhaps we could arrange to get together. Otherwise, maybe a conference call is sufficient.

Please look over the attached Intent and let me know when you and/or John would be available to meet.

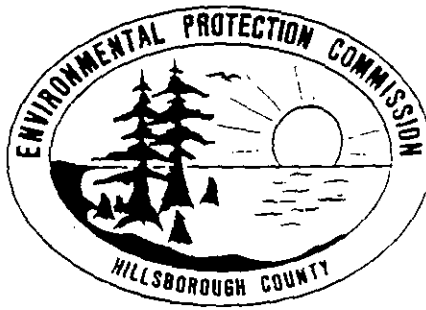
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March 24, 1998

Mr. Willis M. Kitchen
President
Gulf Coast Recycling, Inc.
1901 N. 66th Street
Tampa, FL 33619

RE: Revised Intent

Dear Mr. Kitchen:

Enclosed is the revised Intent to Issue which was discussed with representatives from Gulf Coast Recycling last week. This shall supersede the Intent sent to you on February 13, 1998. Please heed the instructions regarding the public notice requirements and feel free to contact our office if you have any questions.

Mr. Taylor's request on your behalf for an extension of time to file for an administrative hearing is being handled under separate cover by our Legal Department.

Sincerely,

Jerry Campbell, P.E.
Assistant Director

Attachment

cag

cc: William B. Taylor, IV, Esq.



COMMISSION

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MEMORANDUM

DATE: March 10, 1998
TO: Files
FROM: Jerry Campbell *JC*
SUBJECT: GCR Intent of 2/13/98

Upon review of this intent, it appears as though the VOC and the PM allowables must be reduced to avoid triggering PSD. The intent used total PM and a 25 ton significance level, thus leaving GCR subject to testing for PM10 to ensure that the 15 ton significance level for PM10 is not triggered. Since there is no reference method for PM10 for source sampling, the intent should assume all PM is PM10 and reduce the allowable from 32 tons per year to 20.3.

The annual VOC cap in the intent is based on a baseline from the two years of operation prior to submittal of the application in 1994. Using a pounds of VOC per ton of charge emission factor from the 1991 tests, the intent states a figure of 167 tons per year based on 1992 and 1993 charge input to the furnace. Since the source was constructed in 1984, the EPA guidance recommends using pre-84 production data. This reduces the baseline from 128 tons per year to 77. Consequently, the synthetic minor cap can be no greater than 116 tons per any 12 consecutive months.

We will recommend that the intent be reissued with the corrected figures.

cag



PSD Analysis (TPY)

Pollutant	Allowables Under 0570057-009-AC	Pre 84 Furnace Actuals	Difference	Significance Trigger	Comment
SO ₂	683	812 ¹	<0	40	No BACT Required
Pb	0.3	>.3	<0	.3	No BACT Required
PM	20.3	5.9 ²	14.4	15 (PM ₁₀)	No BACT Required
CO	300	1580 ³	<0	100	No BACT Required
NO _x	NA	5	<40	40	Minor w/o Controls
VOC	116	77 ⁴	39	40	No BACT Required

1 208 lb/hr and 7800 hours from EPA Applicability Determination of 1991.

2 1979-1984 data from Kitchen Correspondence dated 6/24/96.

3 1991 test data of 683 lbs/hr prorated down to pre-84 process rate (2.65/4.58).

4 1991 test data of 33.6 lbs/hr prorated down to pre-84 process rate (2.65/4.58).

TECHNICAL EVALUATION

AND

PRELIMINARY DETERMINATION

FOR

Gulf Coast Recycling, Inc.,

Hillsborough County

Construction Permit

Application Number

0570057-002-AC (Formerly PSD-FL-215)
00570057-008-AC, and 0570057-009-AC

Environmental Protection Commission of

Hillsborough County

Tampa, FL

March 10, 1998

I. Project Description

A. Applicant:

Gulf Coast Recycling, Inc.
1901 North 66th Street
Tampa, FL 33619

Mr. Willis M. Kitchen
President

B. Engineer:

Frank J. Burbach
P.E. No.: 42496
Lake Engineering, Inc.
35 Glenlake Parkway
Suite 500
Atlanta, GA 30328

C. Project and Location:

The applicant submitted an application for an after-the-fact construction permit for a 60 ton blast furnace in 1994. It was substantially revised in 1995 to incorporate a desulfurization system for sulfur dioxide controls. This permit incorporates the lead RACT provisions of AC29-258634 as well as the MACT, and is facility wide. It also covers increasing the kettle batch size from 52 TPH to 56 TPH. Further the replacement of the slag stabilization equipment is also covered herein.

<u>Operation</u>	<u>SCC No.</u>
Furnace Operations	3-04-004-03
	3-90-008-99
	3-04-004-99
Refining Operations	3-04-004-07
	3-04-004-09
	3-04-004-14
Miscellaneous	3-05-007-12
	3-05-007-09

The facility is located at 1901 N. 66th Street, Tampa, UTM Coordinates 17-364.05 East and 3093.5 North, Hillsborough County.

D. Process and Controls:

The facility recycles spent automotive and industrial lead-acid batteries to produce lead ingots. Batteries arrive at the facility by truck and are off-loaded directly to the battery process area. The batteries are broken open in a precrusher and some of the acid is drained. A hammer mill serves as the primary crusher followed by two screens/operating in series. Soda ash is mixed with the slurry to form lead carbonate which is separated out in a filter process. The press cake, lead contaminated smaller plastic and rubber parts, and the

mechanically-separated larger pieces of lead scrap are all three sent to the material charging storage area. From the hammermill forward this is the M.A. 41DS Battery Recycling System which reduces the sulfur content of the feed stock and resulting sulfur dioxide emissions from the furnace. The old battery preparation is to be discontinued.

Battery groups are stored in piles in a partially enclosed structure. Battery groups for the blast furnace charge are taken from the older piles. The single blast furnace is used for the melting of battery groups and plant scrap lead. A blast furnace charge is composed of lead, coke, limerock, cast iron, and return slag. Material is charged via a skip hoist with automatically opened charged doors at the top of the furnace. An agglomerating furnace is used to melt flue dust that is collected and fuses the particles together to form a large solid piece of material collected by a receiving vessel. From there the fused material is broken and re-fed to the blast furnace.

Lead and slag are both tapped and collected at the base of the furnace. Lead is tapped to form buttons. Blast lead buttons are transported to the refining area. Refining lead includes soft lead, hard lead, and calcium lead. Refining is accomplished in three 56-ton kettles all fired with natural gas. After refining is completed, drosses are removed and lead is cast into ingots by a pigging machine. The dross is returned to the blast furnace. Some lead is imported and processed in the refining operation.

Slag is processed and stored in an enclosed area. Slag is crushed and then mixed with cement or enviroblend to stabilize the slag. The resulting mixture is used for construction projects at the facility.

Particulate matter and lead emissions from the blast and agglomerating furnace are controlled by a 25,000 ACFM ten compartment baghouse fabricated by Gulf Coast Recycling (GCR) and was modeled after a Wheelabrator-Frye Dustube Model 126, Series 55 shaker baghouse. Particulate matter and lead emissions from the blast furnace charging are captured by a hood and vented to a 9,000 ACFM two compartments shake type baghouse Dustube Model 126 baghouse. Particulate matter and lead emissions from the blast and agglomerating furnace tapping operations are captured by a hood and vented to a 7,000 ACFM one compartment shaker baghouse similar in design to the previously mentioned baghouse. Particulate matter and lead emissions from the refining kettles are controlled by a 17,000 ACFM two compartment shaker baghouse. Emissions from the slag processing are controlled with the use of a 3,500 ACFM shaker type baghouse. Fugitive emissions of particulate matter and lead from process and grounds are controlled through the use of water spray, reasonable precautions, and specific work practices. Flue gas emissions from the furnace operations containing CO, and VOC are controlled by the use of an afterburner.

E. Application Information:

60 Ton Blast Furnace

Received on: May 31, 1994

Substantially Revised: October 11, 1997 and June 19, 1997

Application Complete: December 16, 1997 (60 days prior to
expiration of the last waiver)

Slag Stabilization Equipment

Received on: May 7, 1997

Application Complete: May 7, 1997

Intent to Issue Issued: August 14, 1997

Refining Kettles

Received on: May 7, 1997

Application Complete: May 7, 1997

Intent to Deny Issued: August 14, 1997

II. Rule Applicability

This project is subject to the preconstruction review requirements of Chapter 403, Florida Statutes, Chapters, 62-204, 62-210, 62-212, 62-296, and 62-297, Florida Administrative Code (F.A.C.) and Chapter 1-3 of the Rules of the Environmental Protection Commission of Hillsborough County.

This project is not subject to the requirements of Rule 62-212.400, Prevention of Significant Deterioration, F.A.C. or Rule 62-212.500, New Source Review for Nonattainment Areas, F.A.C., since this project does not meet the definition of a significant modification under the requirements of this rule. The application of the desulfurization system and the afterburner kept the potential emission increase below the significant level for VOC, CO and SO₂. The applicant proposed a PM allowable to keep below the significant increase trigger for PSD. Thus, the addition of the 60 ton furnace is considered a minor modification to a major facility by emissions netting (taking credit for the shutdown of the old furnace). The kettle project and the slag stabilization project are minor as well.

This project is subject to the requirements of Rule 62-212.300, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements, F.A.C., since the facility's operations are a source of air pollution.

This project is not subject to the requirements to Rule 62-296.400, Specific Emission Limiting and Performance Standards, F.A.C., since there is no category for secondary lead smelters.

This project is not subject to the requirements of Rule 62-296.320(4), General Particulate Emission Limiting Standards, F.A.C., since the facility operations are subject to Rules 62-296.600 and 62-296.700, F.A.C.

This project is subject to the requirements of Rule 62-296.320(2), F.A.C., since the facility's operations could potentially contribute to objectionable odors.

This project is not subject to the requirements of Rule 62-296.500, Reasonably Available Control Technology, (for volatile organic compound emitting facilities) F.A.C., since there is no source category for this operation.

This project is subject to the requirements of Rule 62-296.600, Reasonably Available Control Technology for Lead, F.A.C., since it is located within the lead maintenance area.

This project is subject to the requirements of Rule 62-296.700, Reasonably Available Control Technology, F.A.C., since the particulate matter emissions for the facility are more than 15 tons/year and it is located in a maintenance area for particulate matter.

This project is subject to the requirements of Rule 62-204.800, Standards of Performance for New Stationary Sources, F.A.C., since

the facility is a secondary lead smelter and there is a category for this type of operation (40 CFR 60 Subpart L adopted by reference). This project is also subject to the requirements of National Emission Standard for Hazardous Air Pollutants since there is a source category for secondary lead smelters (40 CFR 63 Subpart X adopted by reference).

This project is subject to the requirements of Chapter 84-446, Laws of Florida and Chapter 1-3, Rules of the Environmental Protection Commission of Hillsborough County.

III. Summary of Emissions

Inventory of Title III pollutants is estimated to be less than 25 TPY collectively and 10 tons per year individually. HAPs emitted include metals, benzene, carbon disulfide, 1,3 butadiene, methyl chloride and styrene.

IV. Conclusions:

The emission limits proposed by the applicant will meet all of the requirements of Chapters 62-209, 62-210, 62-212, 62-296 and 62-297, F.A.C., and Chapter 1-3, Rules of the Commission.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-209, 62-210, 62-212, 62-296, and 62-297, F.A.C.

V. Proposed Agency Action:

Pursuant to Section 403.087, Florida Statutes and Rule 62-4.070, Florida Administrative Code, the Environmental Protection Commission of Hillsborough County hereby gives notice of its intent to issue a permit to construct the aforementioned air pollution source in accordance with the draft permit and its conditions as stipulated (see attached).

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V. Proposed Agency Action:

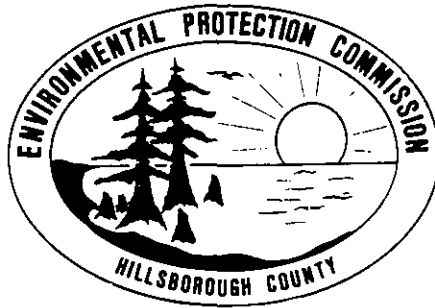
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COMMISSION

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CERTIFIED MAIL Z 180 175

In the Matter of an
Application for Permit by:

File No.: 0570057-002-AC
0570057-008-AC
0570057-009-AC

County: Hillsborough

Mr. Willis M. Kitchen
President
Gulf Coast Recycling, Inc.
1901 N. 66th Street
Tampa, FL 33619

INTENT TO ISSUE

The Environmental Protection Commission of Hillsborough County (EPC), as delegated by the Florida Department of Environmental Protection (DEP) gives notice of its intent to issue a permit (copy attached) for the proposed project as detailed in the application specified above, for the reasons stated below.

The applicant, Gulf Coast Recycling, Inc., applied to the EPC for a permit to authorize the construction of a 60 ton blast furnace, expand the refining kettle capacity, replace equipment associated with the slag stabilization operation, and address the Federal National Emission Standard for Hazardous Air Pollution for secondary lead smelters for their facility located at 1901 N. 66th Street, Tampa, Hillsborough County.

The EPC has permitting jurisdiction under Section 403.087(c), F.S. The project is not exempt from permitting procedures. The EPC has determined that an air pollution construction permit is required for the proposed work.

The EPC intends to issue this permit based on the belief that reasonable assurances have been provided to indicate the proposed project will not adversely impact air quality and the proposed project will comply with the appropriate provisions of Florida Administrative Code Rules 62-204, 62-210, 62-212, 62-296, 62-297, and 62-4.

Pursuant to Section 403.815, F.S. and DEP Rule 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days, in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means

publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the EPC by phone at (813) 272-5530 or at the address listed below. **The applicant shall provide proof of publication to the EPC, Air Permitting Section, at 1410 N. 21st Street, Tampa, Florida 33605 within seven days of publication.** Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The EPC will issue the permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The EPC will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57, Florida Statutes (F.S.), or a party requests mediation as an alternative remedy under section 120.573, F.S. before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with sections 120.569 and 120.57, F.S.. The petition must contain the information set forth below and must be filed (received) in the Legal Department of the EPC at 1900 9th Avenue, Tampa, Florida 33605, (813) 272-5530, fax (813) 272-5605.

Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any other person must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the EPC's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the EPC's action or proposed action;

(d) A statement of the material facts disputed by the petitioner, if any;

(e) A statement of facts that the petitioner contends warrant reversal or modification of the EPC's action or proposed action;

(f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the EPC's action or proposed action; and

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wants the EPC to take with respect to the action or proposed action addressed in this notice of intent.

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

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

The application for a variance or waiver is made by filing a petition with the Legal Department of the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, FL 32399-3000. The petition must specify the following information:

(a) The name, address, and telephone number of the petitioner,

(b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any,

(c) Each rule or portion of a rule from which a variance or waiver is requested,

(d) The citation to the statute underlying (implemented by) the rule identified in (c) above,

(e) The type of action requested,

(f) The specific facts that would justify a variance or waiver for the petitioner,

(g) The reason by the variance or waiver would serve the purposes of the underlying statute (implemented by the rule), and

(h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing

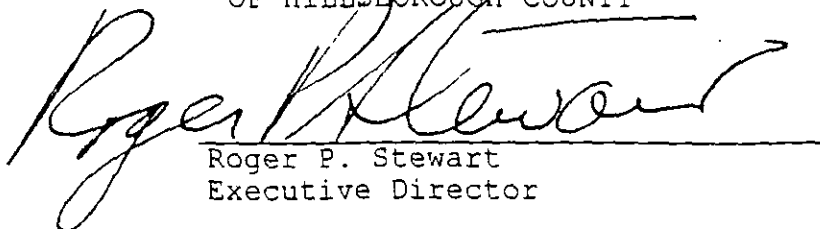
the duration of the variance or waiver requested.

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

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

Executed in Tampa, Florida

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

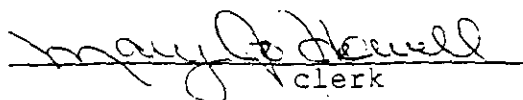

Roger P. Stewart
Executive Director

cc: Florida Department of Environmental Protection,
Southwest District
Frank J. Burbach, P.E., Lake Engineering, Inc.

CERTIFICATE OF SERVICE

The undersigned duly designated clerk hereby certifies that this INTENT TO ISSUE and all copies were mailed by certified mail before the close of business on 03-25-98 to the listed persons.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
Section 120.52(11), Florida
Statutes, with the designated clerk,
receipt of which is hereby
acknowledged.


clerk

03-25-98
Date

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY
NOTICE OF INTENT TO ISSUE PERMIT

The Environmental Protection Commission of Hillsborough County (EPC), as delegated by the Florida Department of Environmental Protection (DEP) gives notice of its intent to issue air pollution permit Nos. 0570057-002-AC, 0570057-008-AC, and 0570057-009-AC to Gulf Coast Recycling, Inc. 1901 N. 66th Street, Tampa, FL 33619 to address expansion of the facility and the Federal National Emission Standards for Hazardous Air Pollutants for secondary lead smelters for the operation located at 1901 N. 66th Street, Tampa, Hillsborough County.

A Best Available Control Technology (BACT) determination was not required.

A person whose substantial interests are affected by the EPC's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Legal Department of the EPC at 1900 9th Avenue, Tampa, FL 33605, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

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

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the EPC's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the EPC with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this Notice in the EPC Legal Department at the above address. Failure to petition within the allowed time frame constitutes a waiver of any

right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 60Q-2.010, F.A.C.

The application and draft permit are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Environmental Protection Commission of Hillsborough County, 1410 N. 21st Street, Tampa, FL 33605.

COMMISSION

DOTTIE BERGER
JOE CHILLURA
CHRIS HART
JIM NORMAN
JAN PLATT
THOMAS SCOTT
ED TURANCHIK

EXECUTIVE DIRECTOR

ROGER P. STEWART



ADMINISTRATIVE OFFICES, LEGAL &
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ENVIRONMENTAL PROTECTION COMMISSION OF
HILLSBOROUGH COUNTY, as Delegated by

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF PERMIT

Mr. Willis M. Kitchen
President
Gulf Coast Recycling, Inc.
1901 N. 66th Street
Tampa, FL 33619

Dear Mr. Kitchen:

Re: Hillsborough County - AP

Enclosed are Permit Numbers 0570057-002-AC/0570057-008-AC/0570057-009-AC which cover the entire facility and address the Lead RACT provisions required pursuant to Rule 62-296.600 F.A.C., the after-the-fact construction of the 60 ton blast furnace, expansion of the refining kettle output, replacement of equipment in the slag stabilization area, and the Maximum Achievable Control Technology Standards of 40 CFR 63 Subpart X issued pursuant to Section 403.087, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the EPC in the Legal Department at 1900 9th Avenue, Tampa, FL 33605; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the clerk of the EPC.

Executed in Tampa, Florida.

Sincerely,

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Roger P. Stewart
Executive Director

cc: Florida Department of Environmental Protection
Frank J. Burbach, P.E., Lake Engineering, Inc.



Gulf Coast Recycling, Inc.
Tampa, FL 33619

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CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies
were mailed before the close of business on
_____ to the listed persons.

Clerk Stamp
FILED, on this date, pursuant to
Section 120.52(11), Florida
Statutes, with the designated clerk,
receipt of which is hereby
acknowledged.

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Clerk

Date

COMMISSION

DOTTIE BERGER
JOE CHILLURA
CHRIS HART
JIM NORMAN
JAN PLATT
THOMAS SCOTT
ED TURANCHIK

EXECUTIVE DIRECTOR

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PERMITTEE:
Gulf Coast Recycling, Inc.
1901 N. 66th Street
Tampa, FL 33619

PERMIT/CERTIFICATION
Permit No.: 0570057-002-AC,
0570057-008-AC, and
0570057-009-AC

County: Hillsborough
Expiration Date: November 1, 2001
Project: Secondary Lead Smelting
Facility

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 62-204, 62-210, 62-212, 62-296, 62-297, and 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 EPC and made a part hereof and specifically described as follows:

For the modification of a secondary lead smelting facility to incorporate reasonably available control technology provisions for lead emissions, the after-the-fact construction of the 60 ton blast furnace, expansion of the refining kettle output, replacement of equipment in the slag stabilization area and the maximum available control technology standards of 40 CFR 63 Subpart X. The facility recycles spent automotive and industrial lead acid batteries to produce lead ingots. Batteries arrive by truck. The batteries are processed through an M. A. Industries Battery Recycling System. A series of equipment mechanically separates the large lead scrap and lead contaminated rubber scrap from the plastics for blast furnace feed. The plastic is taken off-site for recycling. Soda ash is mixed with the effluent to form lead carbonate which is then concentrated in a filter press and captured for charging. This process removes a significant portion of the sulfur from the furnace charge thus reducing SO₂ emissions out the furnace stack.

Battery groups are stored in piles in a partially enclosed structure. The blast furnace is used for the melting of battery group, plant scrap lead, coke, limerock, cast iron, and re-run slag. The furnace is charged via a skip hoist with a manually opened charge door at the top of the furnace. An agglomerating furnace is used to melt flue dust that is collected in the enclosed screw conveyor below the baghouse hoppers and fuses the particles together. The fused material is subsequently broken and re-fed to the blast furnace.

Lead and slag are both tapped and collected at the base of the furnace.

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Lead is tapped to form buttons which are transported to the refining area. Refining lead includes producing soft lead, hard lead, and calcium lead which is accomplished in three 56-ton kettles all fired with natural gas. After refining is completed, drosses are removed and lead is cast into ingots. The dross is returned to the blast furnace.

Slag is stored and processed in an enclosed area. The slag is crushed and then mixed with cement or enviroblend to stabilize the slag. The resulting mixture is used for construction projects at the facility or disposed of off site.

Particulate matter and lead emissions from the blast and agglomerating furnace are controlled by a 25,000 ACFM ten compartment baghouse fabricated by Gulf Coast Recycling (GCR). It was modeled after a Wheelabrator-Frye Dustube Model 126, Series 55 shaker baghouse. Emissions from the blast furnace charging are captured by a hood and vented to a 9,000 ACFM two compartment shaker baghouse fabricated by GCR. The blast and agglomerating furnace tapping emissions are captured by a hood and vented to a 7,000 ACFM one compartment shaker baghouse similar in design to the previously mentioned baghouse. Particulate matter and lead emissions from the refining kettles are controlled by two Wheelabrator-Frye, Model 126 baghouses in parallel and exhausted through a common stack at a design flow rate of 17,000 ACFM. Emissions from the slag grinder are controlled by a 3,500 ACFM baghouse. Fugitive facility grounds are controlled through the use of water sprays, enclosures, reasonable precautions and specific work practices as specified in the specific conditions.

Emissions of carbon monoxide and volatile organic compounds from the furnace operations are controlled by the use of an afterburner.

Location: 1901 N. 66th Street, Tampa

UTM: 17-364.05 E 3093.5 N NEDS No.: 0057

Point ID:	01 - Furnace Exhaust
	02 - 3 Refining Kettles
	04 - Furnace Tapping
	06 - Furnace Charging
	07 - Slag Processing
	08 - Facility Grounds
	(including battery
	breaking operation)

Incorporates Permit No.: AC29-258634

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PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certificate No.: 0570057-002-AC,
0570057-008-AC, 0570057-009-AC
Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

- 1. A part of this permit is the attached General Conditions. [Rule 62-4.160, F.A.C.]
- 2. All applicable rules of the Environmental Protection Commission of Hillsborough County including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction. [Rule 62-4.070(7), F.A.C.]
- 3. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C., or any other requirements under federal, state, or local law. [Rule 62-210.300, F.A.C.]

Facility

- 4. In order to exempt the facility from a PSD review as requested by the permittee, the total emissions from the secondary lead smelting facility shall not exceed 20.3 tons of particulate matter, 300.0 tons of carbon monoxide, 116.0 tons of volatile organic compounds 683.0 tons of sulfur dioxide and 0.3 tons of lead for any consecutive twelve month period. Commencing July 1, 2001, sulfur dioxide emissions are to be reduced to 507 tons per any consecutive 12 month period. [Construction Permit Application and Rule 62-212.300, F.A.C.]
- 5. In order to ensure compliance with the emissions limitations of Specific Conditions No. 4:

- A) Hours of operation shall not exceed 7,800 hours for blast furnace operation, 6000 hours of refining operation, and 1664 hours for slag processing operation for any consecutive twelve month period. [Construction Permit Application]
- B) Process rates for each specified operation shall not exceed the following:

<u>Source</u>	<u>Process Rate</u>
Blast Furnace	6.5 tons charged/hour*
Refining Kettles	56 tons of lead scrap charged per batch per kettle
Slag Processing	6 tons of slag processed/hr.
Soda Ash Silo	40 tons per hour input

* Raw material charging rates on a daily basis shall be consistent with the following percentages: 88% lead scrap and re-run slag, 7% coke, 2.5% limerock, and 2.5% cast iron.

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Gulf Coast Recycling, Inc. 0570057-008-AC, 0570057-009-AC
Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

6. The permittee shall not cause, suffer, allow or permit the discharge of air pollutant which cause or contribute to an objectionable odor. [Rule 62-296.320, F.A.C.]

Emissions Limitations (See Table I as Attached)

Furnace Operations (One blast furnace, one agglomerating furnace, and tapping and charging operations for the furnaces)

7. The permittee shall not discharge lead emissions to exceed the following:

- A) 2.0 mg/dscm (0.00087 gr/dscf) for the blast and the agglomerating furnaces, and the process fugitive sources consisting of the charging and the tapping vented to separate control equipment. Each vent must meet the standards by itself (no averaging). [40 CFR 63 Subpart X and Rule 62-204.800 F.A.C.]
- B) 0.010 gr/dscf for the blast and agglomerating furnaces [Rule 62-296.603, F.A.C.]
- C) 0.002 gr/dscf for the process fugitive sources consisted of the charging and tapping vented to separate control equipment [Rule 62-296.603, F.A.C.]

8. The permittee shall not discharge particulate matter emissions to exceed the following:

- A) 0.013 gr/dscf for the blast furnace and agglomerating furnaces and process fugitive source baghouse exhausts up to the limitations below: [Construction Permit Application and Rule 62-212.300, F.A.C.]

	<u>lbs/hr</u>	<u>tons per 12 months</u>
Blast and Agglomerating Furnace Stack	2.06	7.9
Tapping Stack	0.47	1.8
Charging Stack	1.18	4.6

- B) 50 mg/dscm (0.022 gr/dscf) for the blast and agglomerating furnaces and process fugitive source baghouse exhausts. [40 CFR 60.122(a) and Rule 62-296.800 F.A.C.]
- C) 0.03 gr/dscf for the blast agglomerating furnaces and the process fugitive sources consisting of the charging and tapping vented to separate control equipment. [Rule 62-296.700, F.A.C.]

9. The permittee shall not discharge opacity to exceed the following:

- A) 3% at the exit of the control equipment controlling the furnace and the process fugitive sources. [Rule 62-296.603, F.A.C.]

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PERMITTEE:
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SPECIFIC CONDITIONS:

- B) 6% from the charge door on the blast furnace during charging operations [Rule 62-296.603, F.A.C.]
- C) 3% from the closed charge door on the blast furnace during operation. [Rule 62.296.603, F.A.C.]

10. The permittee shall not discharge total hydrocarbons in excess of 360 PPM by volume, expressed as propane corrected to 4 percent CO₂, up to 114.3 tons per any 12 consecutive 12 months, to the atmosphere from the blast furnace [40 CFR 63 Subpart X and Rule 62-204.800, F.A.C.]

11. The permittee shall not discharge total hydrocarbons greater than 0.20 kilograms per hour (0.44 pounds per hour) to the atmosphere from the process fugitive sources consisting of the charging and the tapping vented to separate control equipment. [40 CFR 63 Subpart X and Rule 62-204.800, F.A.C.]

12. The permittee shall not discharge more than 68 pounds per hour of carbon monoxide to the atmosphere from the blast and the agglomerating furnaces. [Construction Permit Application and Rule 62-212.300, F.A.C.]

13. In order to ensure compliance with the emission limiting standards of Specific Condition Nos. 10 and 12, the permittee shall install, maintain and operate a natural gas - fired afterburner with a minimum temperature of 1400°F and 0.5 seconds residence time to achieve a 90% destruction efficiency for both carbon monoxide and hydrocarbons. [Construction Permit Application, 40 CFR 63 Subpart X, and Rule 62-212.300, F.A.C.]

14. Prior to July 1, 2001, the permittee shall not discharge more than 175 pounds per hour of sulfur dioxide from the blast and the agglomerating furnaces. After June 30, 2001, the permittee shall not discharge more than 130 pounds per hour sulfur dioxide from these same two furnaces. [Construction Permit Application and Rule 62-212.300, F.A.C.]

15. In order to ensure compliance with the emission limiting standard of Specific Condition No. 14, the permittee shall install, maintain and operate a M. A. Industries Model 41 Desulfurization System to process all incoming batteries prior to charging to the furnace. If the EPA Method No. 6 test required under Specific Condition No. 29 does not demonstrate compliance with the 175 pounds of sulfur dioxide per hour standard, the permittee shall immediately reduce the furnace charge rate to 4.58 tons per hour until such time they can demonstrate compliance at the higher rate. Within 6 months of a failed compliance demonstration, the permittee shall install paste repulping and refiltering equipment referred to in M. A. Industries letter of December 4, 1995, or take other alternate measures to reduce emissions

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PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certificate No.: 0570057-002-AC,
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Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

below the 175 pound standard. Alternate measures must be prepared under the direction of a professional engineer registered in the State of Florida, and must have prior approval from the EPC and the Department. Installation of the paste repulping and refiltering equipment does not relieve the permittee from having to meeting the 175 pound per hour standard. [Construction Permit Application and Rule 62-4.07(3), F.A.C.]

16. The process fugitive sources consisting of the charging and the tapping of the blast furnace shall be ventilated to maintain a face velocity of at least 90 meters per minute (300 fpm) at all hood openings, or shall be located in a total enclosure that is ventilated to achieve air velocity into the enclosure at doorway openings of not less than 75 meters per minute (250 fpm). All such exhaust shall be directed to control equipment that shall not discharge lead in excess of the limitations in Specific Condition 7.A. [40 CFR 63 Subpart X and Rule 62-204.800, F.A.C.]

Refining Operation (3 natural gas fired 56-ton refining kettles and associated pigging machines)

17. The permittee shall not discharge lead emissions to exceed the following:

- A) 0.0002 gr/dscf [Rule 62-296.603(1)(d), F.A.C.]
- B) 2.0 mg/dscm (0.00087 gr/dscf). [40 CFR Subpart X and Rule 62-204.800, F.A.C.]

18. No more than two 56-ton refining kettles shall be operated at a time. [Construction Permit Application]

19. The permittee shall not discharge opacity from the refining kettle operation in excess of 3% [Rule 62-296.603, F.A.C.]

20. The refining kettles and the associated pigging machines shall be ventilated to maintain a face velocity of 75 meters per minute (250 fpm) or shall be located in a total enclosure that is ventilated to achieve air velocity with the enclosure at doorway openings of not less than 75 meters per minute (250 fpm). All such exhaust shall be directed to control equipment that shall not discharge lead in excess of the limitations in Specific Condition 17.B [40 CFR 63 Subpart X and Rule 62-204.800, F.A.C.]

21. The refining kettles shall be fired only with natural gas at a maximum heat input rate of 4.0 MMBTU/hr. per kettle. [Construction Permit Application]

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PERMITTEE:
Gulf Coast Recycling, Inc.

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Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

22. The permittee shall not discharge particulate matter emissions from the lead refining area baghouse to exceed 0.013 gr/dscf, 1.76 pounds/hr. and 5.2 tons per any 12 consecutive month period [Rule 62-212.300, F.A.C. and Construction Permit Application]

23. Maximum production from the refining kettles shall not exceed 30,000 tons/yr. of finished lead. [Construction Permit Application and Rule 62-4.070, F.A.C.]

24. Any time that a kettle is being heated to refine lead or to bring it to temperature prior to receiving a charge of lead or it contains a charge of lead irregardless of whether heat is being applied, the kettle shall be vented to the baghouse and the baghouse shall be operational. This time shall count towards the 6,000 hours allowed during any twelve (12) month consecutive month period. [Construction Permit Application and Rule 62-4.070(3), F.A.C.]

Miscellaneous Operations (Slag handling and processing, battery cracking operation)

25. The permittee shall not discharge emissions to exceed the following: [Rule 62-296.603(e) and (f), F.A.C.]

- A) 3% opacity for the battery cracking operations.
- B) 0.000333 gr of lead/dscf for the slag handling and processing operations which includes receiving hopper and conveyor drop/crusher sources collectively.
- C) 3% opacity for the entire slag handling and processing operations which include receiving hopper and conveyor drop/crusher collectively and the structure housing the processing operation.
- D) 5% opacity from the soda ash silo

26. Particulate matter emissions from the slag handling and processing operation and the soda ash silo shall be less than one ton per year (0.4 tons) in order to exempt these operations from the particulate RACT. [Rule 62-296.700(2)(c), F.A.C.]

27. The average lead content of the slag processed shall not exceed 7% lead by weight on an annual basis. (The range of lead content is usually 5 to 9% lead by weight.) Only slag generated on-site may be processed. [Construction Permit Application and Rule 62-4.070 (3), F.A.C.]

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PERMITTEE:
Gulf Coast Recycling, Inc.

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SPECIFIC CONDITIONS:

Fugitives, Confined and Unconfined Sources

28. No owner or operator of a lead processing operation shall cause, allow, or permit the emissions of lead, including emissions of lead from vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrial-related activities such as loading, unloading, charging, melting, tapping, casting, storing or handling, unless reasonably available control technology and maximum available control technology are employed to control such lead emissions. RACT and MACT measures shall include but not be limited to the following: [Rule 62-296.601(2), F.A.C., 40 CFR 63 Subpart X, Consent Order of September 4, 1996, and Construction Permit Application]

- A) Maintain slide gates in the exit of the baghouse hoppers to prevent the re-entrainment of dust collected in the screw conveyor on the hygiene baghouses.
- B) Maintain enclosed screw conveyor below the furnace baghouse hoppers to prevent re-entrained dust.
- C) Maintain wind breaks and panels installed along bottom of the agglomerating furnace, southside of the furnace baghouse support structure, south and west sides of group pile storage building, and windbreak installed along the entire south property boundary.
- D) Prohibit vehicular traffic on unpaved areas.
- E) Maintain vegetation coverage on all of the unpaved plant grounds.
- F) Three times daily, regardless of plant operation, vacuum paved areas using a HEPA filter equipped vacuum except when natural precipitation makes it impractical.
- G) Maintain a tire wash for frontend loader at the entrance of the group pile storage building to prevent tracking of lead bearing materials outside the area.
- H) Eliminate slag transfer with frontend loader through the plant. Store, handle, and process slag in enclosed structures.
- I) Use only trained personnel for furnace operations.
- J) Maintain the sprinkler system and operate it in accordance with the attached sprinkler plan. (Attachment A)
- K) Maintain partial enclosure of the battery storage piles and water them with sufficient frequency and quantity to prevent the formation of dust.
- L) Vacuum the pavement in the battery breaking area with a HEPA filter equipped vacuum at least twice a day.
- M) Maintain the partial enclosure in the furnace area.
- N) Vacuum the pavement in the furnace area with a HEPA filter equipped vacuum or wet pavement with water at least twice a day.

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PERMITTEE:
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SPECIFIC CONDITIONS:

- O) Maintain the partial enclosure in the refining area.
- P) Vacuum the pavement in the refining area with HEPA filter equipped vacuum or water at least twice a day.
- Q) Maintain partial enclosure with wet suppression for the storage of any lead bearing materials and a vehicle wash at the exit of the area, or total enclosure in a structure meeting the requirements of 40 CFR 265.1101(a) and (c) and ventilation to a control device and a vehicle wash at the exit the area. The discharge from that control device may not contain lead compounds in excess of 20 mg/dscm (0.00087/gr/dscf).
- R) Maintain daily records of all wet suppression, pavement cleaning and vehicle washing activities as per the attached "Fugitive Dust Control Standard Operating Procedures Manual."

Testing Methods and Procedures

29. In order to meet the requirements of 40 CFR 63.7, and the non-PSD portion of this permit, test the emissions for the following pollutant(s) prior to June 19, 1998 and submit 2 copies of the Air Compliance Section of the Air Management Division of the Environmental Protection Commission of Hillsborough County within 45 days of such testing. Testing procedures shall be consistent with the requirements of the 40 CFR 63 and Rule 62-297, F.A.C.:

Blast and Agglomeration Furnace Exhaust Stack

- | | |
|---|--|
| (X) Pb | (X) Hydrocarbons (Inlet and Outlet of Afterburner) |
| (X) PM | (X) Opacity |
| (X) Carbon Monoxide (Inlet and Outlet of Afterburner) | (X) Sulfur Dioxide |

Process Fugitive Source Stacks (Tapping, Charging and Refining Kettles)

- | | |
|--------|--|
| (X) Pb | (X) Opacity |
| (X) PM | (X) Hydrocarbons (Tapping & Charging Only) |

Slag Stabilization Stack

- | | |
|--------|-------------|
| (X) Pb | (X) Opacity |
| (X) PM | |

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PERMITTEE: Permit/Certificate No.: 0570057-002-AC,
Gulf Coast Recycling, Inc. 0570057-008-AC, 0570057-009-AC
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SPECIFIC CONDITIONS:

Blast Furnace Tapping Enclosure

(X) Opacity (X) Face Velocity

Blast Furnace Charging Enclosure

(X) Opacity (Open and Closed Doors) (X) Face Velocity

Agglomeration Furnace Tapping Enclosure

(X) Opacity (X) Face Velocity

Refining Kettles and Pigging Machines Enclosures

(X) Opacity (X) Face Velocity

Battery Cracking Enclosure

(X) Opacity

30. Compliance with the emission limitations of Specific Condition Nos. 4, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 19, 20, 22, 25, and 26 shall be demonstrated using the EPA test methods 1, 2, 3, 4, 5, 6, 9, 10, 12, and 25A contained in the 40 CFR 60, Appendix A and adopted by reference in Rule 62-297, F.A.C., also the requirements of 40 CFR 63.547 must be met. The minimum requirements for stack sampling facilities source sampling and reporting, shall be in accordance with Rule 62-297, F.A.C., 40 CFR 60, Appendix A and 40 CFR 63. In the case of the Method 9, all readings shall be at least 30 minutes in duration and concurrent with one of the Method 12 runs.

31. The permittee shall provide at least the minimum requirements for stack sampling facilities as specified in 40 CFR 60.8(e)(1), (2), (3) and (4), 40 CFR 63.7, and Rule 62-297, F.A.C. Sources sampling platforms, platform access, and other associated work areas, whether permanent or temporary, shall be in accordance with Occupational Safety and Health Administration standards per 29 CFR 1910, Subparts D and E.

32. Testing of emissions shall be conducted with the source operating at capacity with conditions representative of normal operations. Capacity is defined as 90-100% of rated capacity as specified in Specific Condition No. 5. If it is impracticable to test at capacity,

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Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

then the source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the EPC. For the blast furnace and refining kettles, the type and amounts of materials charged during the test must also be included. Testing of refining operation must be accomplished while two kettles are operating. Failure to submit the input rates control equipment parameters such as pressure drops and afterburner temperatures and actual operating conditions may invalidate the test. [Rule 62-4.070, F.A.C]

33. The permittee shall notify the Air Compliance Section of the Environmental Protection Commission of Hillsborough County at least 60 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 contact person who will be responsible for coordinating and having such test conducted. Along with the notification, the permittee shall submit a site-specific test plan to include a test program summary, the schedule, data quality objectives, and both the internal and the external quality assurance program. [40 CFR 63.7]

34. Permittee shall analyze performance audit samples during each performance test. The audit samples shall be requested by the permittee at least 45 days prior to the test date. [40 CFR 63.7]

35. Records of the initial performance tests required by the permit shall be retained by the permittee for a minimum of 5 years and made available upon request [40 CFR 63.7]

36. Visible emission tests, in part, must be conducted in accordance with the following requirements: [Rule 62-296.600, F.A.C.]

- A) The visible emission tests on the lead refining area baghouse and the building shall be at least thirty (30) minutes in duration pursuant to Rule 62-297, F.A.C., and shall be conducted concurrent with one of the Method 12 runs.
- B) The visible emission test on the blast furnace shall be thirty (30) minutes in duration pursuant to Rule 62-297 F.A.C., and shall be conducted concurrent with one of the Method 12 runs.
- C) The visible emission tests on the blast furnace charging operation shall each be thirty (30) minutes in duration, pursuant to Rule 62-297.330 F.A.C. Readings shall be taken on the:

- 1) Charge door on the blast furnace during charging (closest potential emission point).

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PERMITTEE: Permit/Certificate No.: 0570057-002-AC,
Gulf Coast Recycling, Inc. 0570057-008-AC, 0570057-009-AC
Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

- 2) Closed charge doors on the blast furnace during furnace operation (closest potential emission point).
- 3) Baghouse exhaust during blast furnace operation.
- D) The visible emission test on the blast furnace tapping shall be thirty (30) minutes in duration pursuant to Rule 62-297.330, F.A.C. Readings shall be taken only during product tapping on the baghouse exhaust and on the tapping doors.

37. When the Environmental Protection Commission of Hillsborough County (EPC) after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in Rule 62-210, 62-212, 62-252, 62-296, or 62-297, F.A.C., or in a permit issued pursuant to those rules is being violated, it may require the owner of the source to conduct compliance tests which identify the nature and quantity of pollutant emissions from the source and to provide a report on the results of said tests to the EPC. [Rule 62-297,340(2), F.A.C.]

Monitoring and Record Keeping

38. By June 22, 1998, the permittee shall submit a single operation and maintenance plan to meet the particulate RACT requirements of Rule 62-296.700, F.A.C.; the lead RACT requirements of Rule 62-296.600, F.A.C.; and the MACT requirements of 40 CFR 63.548 (Attachment C in part). These three rules all require certain operation and maintenance provisions and those requirements must be met immediately. This Specific Condition simply requires the permittee to combine the plans into a single document and submit it for incorporation into the Title V permit.

39. The permittee shall install, calibrate and maintain a device to monitor and to record the temperature in the afterburner chamber on a continuous basis; or shall monitor and record the temperature in the afterburner every 15 minutes while the source is in operation. If the temperature falls more than 50°F below the 3 hour average during the hydrocarbon compliance demonstration, it shall constitute a violation of the applicable emission standard listed in this permit. [40 CFR 63.548(h)]

40. Within 45 days of conducting the compliance test required under Specific Condition No. 29, the permittee shall submit a complete notification of compliance status along with the test report. [40 CFR 63.9(h)]

41. Excess emissions resulting from the start-up, shutdown or malfunction of any emissions unit shall be permitted provided best

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PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certificate No.: 0570057-002-AC,
0570057-008-AC, 0570057-009-AC
Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

operational practices to minimize emissions are adhered to. For sulfur dioxide control, best operational practice shall mean that no battery processing will be done unless the desulfurization equipment is operational. For hydrocarbon and carbon monoxide control, best operational practice shall mean the furnace operation can continue for up to 3 hours in which the afterburner falls less than 50°F below the average temperature recorded in the last compliance test. If the temperature falls more than 50° for up to one hour, the furnace operation shall cease. For particulate and lead control, best operational practices shall mean the emission unit can continue for up to two hours following the alarm being triggered for a broken bag. After 2 hours, the cell where the broken bag is located shall be sealed off, or the bag will have been replaced to continue operation of that particular emission unit. If a compartment is sealed off while the emission unit is operated for any period of time, the EPC may request a compliance demonstration under equivalent conditions. [Rule 62-210.700]

42. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(3)]

43. If an excess emission occurs, the permittee shall file a report semianually covering the periods January to June and July to December within 30 days of the period. The report shall be consistent with the requirements of 40 CFR 63.10(d)(5)(i). If the action taken is not consistent with the permittee's startup, shutdown, and malfunction plan, the more immediate reporting requirements of 40 CFR 63.10(5)(d)(ii) shall apply.

44. Within 270 days of receipt of this permit or by December 1, 1998, whichever occurs first, the permittee shall install, calibrate, and maintain a continuous emission monitor for the pollutant sulfur dioxide on the furnace exhaust line. The monitor shall meet the requirements of 40 CFR 60 Appendix A Performance Specification 2 and 40 CFR 60 Appendix F. Initial certification shall be completed within 90 days of installation. Following the initial certification, the permittee may request that the continuous emission monitor become the referenced method by requesting an alternate sampling procedure pursuant to Rule 62-297.620, F.A.C. [Rule 62-4.070(3), F.A.C.]

45. The permittee shall maintain and calibrate elapsed time meters on all the emission units covered under this permit. The meters shall be accurate within 10 percent (10%) and used to keep the records required by Specific Condition No. 47. [Rule 62-4.070(3), F.A.C.]

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certificate No.: 0570057-002-AC,
0570057-008-AC, 0570057-009-AC
Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

46. The permittee shall maintain and calibrate a device which continuously measures and records the pressure drop across the baghouses controlling the emission units covered under this permit. [Rule 62-4.070(3), F.A.C.]

47. The permittee shall keep the following records to ensure compliance with Specific Condition Nos. 4, 5A), 23 and 45: [Rule 62-4.070(3), F.A.C.]

- A) Monthly and rolling twelve month totals in hours from the elapsed time meters on each of the emission units covered under this permit.
- B) Monthly and rolling twelve month totals of production from the refining kettles in tons.

48. The permittee shall keep a record on the material input to the blast furnace for each and every hour and back calculate a ton per hour input figure. [Rule 62-4.070(3)]

49. All record keeping required by this permit shall be maintained for a least five years by the permittee and made available to the EPC upon request. [40 CFR 63 Subpart X]

50. Submit to the Environmental Protection Commission of Hillsborough County each calendar year on or before March 1, completed DEP Form 62-210.900(4), "Annual Operating Report for Air Pollutant Emitting Facility", for the preceding calendar year. [Rule 62-210.370(3), F.A.C.]

51. Notwithstanding any of the other Specific Conditions of this permit, the following Subparts of 40 CFR 63 A shall apply to this permittee: 63.1; 63.2; 63.3; 63.4; 63.5; 63.6(a), (b), (c), (e), (f), (g), (i), and (j); 63.7; 63.8; 63.9(a), (b), (c), (d), (e), (g), (h)(1-3), h(5-6), and (j); 63.10; and 63.12-15.

Concluding Conditions

52. The permittee shall provide timely notification to the Environmental Protection Commission of Hillsborough County prior to implementing any changes that may result in a modification to this permit pursuant to Rule 62-210.200(187), F.A.C., Modification. The changes do not include normal maintenance, but may include, and are not limited to, the following, and may also require prior authorization before implementation: [Rules 62-210.300 and 62-4.070(3), F.A.C.]

- A) Alteration or replacement of any equipment or major component of such equipment.

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PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certificate No.: 0570057-002-AC,
0570057-008-AC, 0570057-009-AC
Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

B) Installation or addition of any equipment which is a source of air pollution.

53. If the permittee wishes to transfer this permit to another owner, an "Application for Transfer of Permit" (DEP Form 17-1.201(1)) shall be submitted, in duplicate, to the Environmental Protection Commission of Hillsborough County within 30 days after the sale or legal transfer of the permitted facility. [Rule 62-4.120, F.A.C.]

54. Within 45 days of completion of the testing required by Specific Condition No. 27, the permittee shall submit a revised Title V application (two copies) to address the limitations of this permit and the physical and operational changes made at the facility to comply with them.

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

DRAFT

Roger P. Stewart
Executive Director

DRAFT

TABLE I

ALLOWABLE EMISSIONS																
	PM			Opacity	Pb		NOx	VOC			CO		SO ₂ - Prior to 7/01/2001		SO ₂ - Commencing 7/01/2001	
	gr/dscf	lb/hr	TPY		gr/dscf	TPY		TPY	PPM	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr
FURNACE OPERATIONS																
Blast and Agglomerating Furnaces	0.013	2.06	7.9	3%	0.00087	0.14	NA	360		114.3	68	300	175	683	130	507
Tapping Operations	0.013	0.47	1.8	3%	0.00087	0.02	NA		0.44	1.7		NA		NA		NA
Charging Operations	0.013	1.18	4.6	3%	0.00087	0.05	NA						NA		NA	
REFINING OPERATIONS																
(3) Refining Kettles	0.013	1.76	5.2	3%	0.0002	0.08	NA			NA		NA		NA		NA
MISCELLANEOUS																
Slag Processing			0.4	3%	0.0000333	0.00	NA			NA		NA		NA		NA
Facility Grounds and Miscellaneous Operations				3%												
Soda Ash Silo			0.4	5%												
TOTALS			20.3			<0.3	NA			116		300		683		507

EPA

TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION
FOR

Gulf Coast Recycling, Inc.,

Hillsborough County

Construction Permit

Application Number

0570057-002-AC (Formerly PSD-FL-215)
00570057-008-AC, and 0570057-009-AC

Environmental Protection Commission of

Hillsborough County

Tampa, FL

February 13, 1998

RECEIVED

FEB 16 1998

BUREAU OF
AIR REGULATION

I. Project Description

A. Applicant:

Gulf Coast Recycling, Inc.
1901 North 66th Street
Tampa, FL 33619

Mr. Willis M. Kitchen
President

B. Engineer:

Frank J. Burbach
P.E. No.: 42496
Lake Engineering, Inc.
35 Glenlake Parkway
Suite 500
Atlanta, GA 30328

C. Project and Location:

The applicant submitted an application for an after-the-fact construction permit for a 60 ton blast furnace in 1994. It was substantially revised in 1995 to incorporate a desulfurization system for sulfur dioxide controls. This permit incorporates the lead RACT provisions of AC29-258634 as well as the MACT, and is facility wide. It also covers increasing the kettle batch size from 52 TPH to 56 TPH. Further the replacement of the slag stabilization equipment is also covered herein.

<u>Operation</u>	<u>SCC No.</u>
Furnace Operations	3-04-004-03
	3-90-008-99
	3-04-004-99
Refining Operations	3-04-004-07
	3-04-004-09
	3-04-004-14
Miscellaneous	3-05-007-12
	3-05-007-09

The facility is located at 1901 N. 66th Street, Tampa, TX
Coordinates 17-364.05 East and 3093.5 North, Hillsborough
County.

D. Process and Controls:

The facility recycles spent automotive and industrial lead-acid batteries to produce lead ingots. Batteries arrive at the facility by truck and are off-loaded directly to the battery process area. The batteries are broken open in a precrusher and some of the acid is drained. A hammer mill serves as the primary crusher followed by two screens/operating in series. Soda ash is mixed with the slurry to form lead carbonate which is separated out in a filter process. The press cake, lead contaminated smaller plastic and rubber parts, and the

mechanically-separated larger pieces of lead scrap are all three sent to the material charging storage area. From the hammermill forward this is the M.A. 41DS Battery Recycling System which reduces the sulfur content of the feed stock and resulting sulfur dioxide emissions from the furnace. The old battery preparation is to be discontinued.

Battery groups are stored in piles in a partially enclosed structure. Battery groups for the blast furnace charge are taken from the older piles. The single blast furnace is used for the melting of battery groups and plant scrap lead. A blast furnace charge is composed of lead, coke, limerock, cast iron, and return slag. Material is charged via a skip hoist with automatically opened charged doors at the top of the furnace. An agglomerating furnace is used to melt fine dust that is collected and fuses the particles together to form a large solid piece of material collected by a receiving vessel. From there the fused material is broken and re-fed to the blast furnace.

Lead and slag are both tapped and collected at the base of the furnace. Lead is tapped to form buttons. Blast lead buttons are transported to the refining area. Refining lead includes soft lead, hard lead, and calcium lead. Refining is accomplished in three 56-ton kettles all fired with natural gas. After refining is completed, drosses are removed and lead is cast into ingots by a pigging machine. The dross is returned to the blast furnace. Some lead is imported and processed in the refining operation.

Slag is processed and stored in an enclosed area. Slag is crushed and then mixed with cement or enviroblend to stabilize the slag. The resulting mixture is used for construction projects at the facility.

Particulate matter and lead emissions from the blast and agglomerating furnace are controlled by a 25,000 ACFM ten compartment baghouse fabricated by Gulf Coast Recycling (GCR) and was modeled after a Wheelabrator-Frye Dustube Model 126, Series 55 shaker baghouse. Particulate matter and lead emissions from the blast furnace charging are captured by a hood and vented to a 9,000 ACFM two compartments shake type baghouse Dustube Model 115 baghouse. Particulate matter and lead emissions from the blast and agglomerating furnace tapping operations are captured by a hood and vented to a 7,000 ACFM one compartment shaker baghouse similar in design to the previously mentioned baghouse. Particulate matter and lead emissions from the refining kettles are controlled by a 17,000 ACFM two compartment shaker baghouse. Emissions from the slag processing are controlled with the use of a 3,500 ACFM shaker type baghouse. Fugitive emissions of particulate matter and lead from process and grounds are controlled through the use of water spray, reasonable precautions, and specific work practices. Flue gas emissions from the furnace operations containing CO, and VOC are controlled by the use of an afterburner.

E. Application Information:

60 Ton Blast Furnace

Received on: May 31, 1994

Substantially Revised: October 11, 1997 and June 19, 1997

Application Complete: December 16, 1997 (60 days prior to
expiration of the last waiver)

Slag Stabilization Equipment

Received on: May 7, 1997

Application Complete: May 7, 1997

Intent to Issue Issued: August 14, 1997

Refining Kettles

Received on: May 7, 1997

Application Complete: May 7, 1997

Intent to Deny Issued: August 14, 1997

II. Rule Applicability

This project is subject to the preconstruction review requirements of Chapter 403, Florida Statutes, Chapters, 62-204, 62-210, 62-212, 62-296, and 62-297, Florida Administrative Code (F.A.C.) and Chapter 1-3 of the Rules of the Environmental Protection Commission of Hillsborough County.

This project is not subject to the requirements of Rule 62-212.400, Prevention of Significant Deterioration, F.A.C. or Rule 62-212.500, New Source Review for Nonattainment Areas, F.A.C., since this project does not meet the definition of a significant modification under the requirements of this rule. The application of the desulfurization system and the afterburner kept the potential emission increase below the significant level for VOC, CO and SO₂. Thus, the addition of the 60 ton furnace is considered a minor modification to a major facility by emissions netting (taking credit for the shutdown of the old furnace). The kettle project and the slag stabilization project are minor as well.

This project is subject to the requirements of Rule 62-212.300, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements, F.A.C., since the facility's operations are a source of air pollution.

This project is not subject to the requirements to Rule 62-296.400, Specific Emission Limiting and Performance Standards, F.A.C., since there is no category for secondary lead smelters.

This project is not subject to the requirements of Rule 62-296.320(4), General Particulate Emission Limiting Standards, F.A.C., since the facility operations are subject to Rules 62-296.600 and 62-296.700, F.A.C.

This project is subject to the requirements of Rule 62-296.320(2), F.A.C., since the facility's operations could potentially contribute to objectionable odors.

This project is not subject to the requirements of Rule 62-296.500, Reasonably Available Control Technology, (for volatile organic compound emitting facilities) F.A.C., since there is no source category for this operation.

This project is subject to the requirements of Rule 62-296.400, Reasonably Available Control Technology for Lead, F.A.C., since it is located within the lead maintenance area.

This project is subject to the requirements of Rule 62-296.700, Reasonably Available Control Technology, F.A.C., since the particulate matter emissions for the facility are more than 15 tons/year and it is located in a maintenance area for particulate matter.

This project is subject to the requirements of Rule 62-204.800, Standards of Performance for New Stationary Sources, F.A.C., since the facility is a secondary lead smelter and there is a category

for this type of operation (40 CFR 60 Subpart L adopted by reference). This project is also subject to the requirements of National Emission Standard for Hazardous Air Pollutants since there is a source category for secondary lead smelters (40 CFR 63 Subpart X adopted by reference).

This project is subject to the requirements of Chapter 94-446, Laws of Florida and Chapter 1-3, Rules of the Environmental Protection Commission of Hillsborough County.

III. Summary of Emissions

Inventory of Title III pollutants is estimated to be less than 25 TPY collectively and 10 tons per year individually. HAPs emitted include metals, benzene, carbon disulfide, 1,3 butadiene, methyl chloride and styrene.

IV. Conclusions:

The emission limits proposed by the applicant will meet all of the requirements of Chapters 62-209, 62-210, 62-212, 62-296 and 62-297, F.A.C., and Chapter 1-3, Rules of the Commission.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-209, 62-210, 62-212, 62-296, and 62-297, F.A.C.

V. Proposed Agency Action:

Pursuant to Section 403.087, Florida Statutes and Rule 62-4.070, Florida Administrative Code, the Environmental Protection Commission of Hillsborough County hereby gives notice of its intent to issue a permit to construct the aforementioned air pollution source in accordance with the draft permit and its conditions as stipulated (see attached).

ESTIMATED ACTUALS AFTER CONTROLS ¹

	PM			Opacity	Pb		NOx	VOC			CO		SO ₂ - Prior to 7/01/2001		SO ₂ - Commencing 7/01/2001	
	gr/dscf	lb/hr	TPY		gr/dscf	TPY		PPM	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
FURNACE OPERATIONS																
Blast and Agglomerating Furnace	0.001	0.15	<11.6	0	0.00016	<0.14	<10	<360		<167	<68	<300	<175	<683	<130	<507
Tapping Operations	0.007	0.01	<2.2	0	0.00085	<0.02			<0.44	<1.72						NA
Charging Operations	0.000	0.001	<0.1	0	0.00002	<0.05										NA
REFINING OPERATIONS																
(3) Refining Kettles	0.00	0.11	<10.44	0	0.00000	<0.08	NA			NA	NA		NA			NA
MISCELLANEOUS																
Slag Processing	0.00	0.00	<1	0	0.000010	0.00	NA			NA	NA		NA			NA
Facility Grounds and Miscellaneous Operations				0		0.42										NA
Soda Ash Silo			<1	<5t												
TOTALS			<32.3			<1	<10			<169		<300		<683	<130	<507

ALLOWABLES

	PM			Opacity	Pb		NOx	VOC			CO		SO ₂ - Prior to 7/01/2001		SO ₂ - Commencing 7/01/2001	
	gr/dscf	lb/hr	TPY		gr/dscf	TPY		PPM	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
FURNACE OPERATIONS																
Blast and Agglomerating Furnaces	0.022	3.74	14.6	3t	0.00087	0.14	NA	360		167	68	300	175	683	130	507
Tapping Operations	0.022	0.57	2.2	3t	0.00087	0.02	NA				NA		NA			NA
Charging Operations	0.022	1.41	5.1	3t	0.00087	0.05	NA		0.44	1.72	NA		NA			NA
REFINING OPERATIONS																
(3) Refining Kettles	0.03	3.36	10.44	3t	0.0002	0.08	NA			NA	NA		NA			NA
MISCELLANEOUS																
Slag Processing			<1	3t	0.0000333	0.00	NA			NA	NA		NA			NA
Facility Grounds and Miscellaneous Operations				3t							NA		NA			NA
Soda Ash Silo			<1	5t												
TOTALS			<32.3			<1	NA			<169		300		<683		507

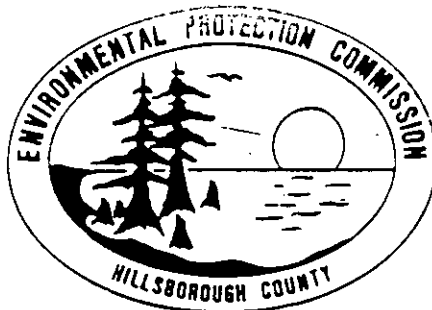
¹ Based on actual test data for Pb and PM

COMMISSION

DOTTIE BERGER
JOE CHILLURA
CHRIS HART
JIM NORMAN
JAN PLATT
THOMAS SCOTT
ED TURANCHIK

EXECUTIVE DIRECTOR

ROGER P. STEWART



ADMINISTRATIVE OFFICES, LEGAL &
WATER MANAGEMENT DIVISION
1900 - 9TH AVENUE
TAMPA, FLORIDA 33605
TELEPHONE (813) 272-5960
FAX (813) 272-5157

AIR MANAGEMENT DIVISION
TELEPHONE (813) 272-5530

WASTE MANAGEMENT DIVISION
TELEPHONE (813) 272-5788

WETLANDS MANAGEMENT DIVISION
TELEPHONE (813) 272-7104

CERTIFIED MAIL Z 180 175 230

In the Matter of an
Application for Permit by:

File No.: 0570057-002-AC
0570057-008-AC
0570057-009-AC
County: Hillsborough

Mr. Willis M. Kitchen
President
Gulf Coast Recycling, Inc.
1901 N. 66th Street
Tampa, FL 33619

INTENT TO ISSUE

The Environmental Protection Commission of Hillsborough County (EPC), as delegated by the Florida Department of Environmental Protection (DEP) gives notice of its intent to issue a permit (copy attached) for the proposed project as detailed in the application specified above, for the reasons stated below.

The applicant, Gulf Coast Recycling, Inc., applied to the EPC for a permit to authorize the construction of a 60 ton blast furnace, expand the refining kettle capacity, replace equipment associated with the slag stabilization operation, and address the Federal National Emission Standard for Hazardous Air Pollution for secondary lead smelters for their facility located at 1901 N. 66th Street, Tampa, Hillsborough County.

The EPC has permitting jurisdiction under Section 403.087(c), F.S. The project is not exempt from permitting procedures. The EPC has determined that an air pollution construction permit is required for the proposed work.

The EPC intends to issue this permit based on the belief that reasonable assurances have been provided to indicate the proposed project will not adversely impact air quality and the proposed project will comply with the appropriate provisions of Florida Administrative Code Rules 62-204, 62-210, 62-212, 62-296, 62-297, and 62-4.

Pursuant to Section 403.815, F.S. and DEP Rule 62-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days, in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means

publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the EPC by phone at (813) 272-5530 or at the address listed below. The applicant shall provide proof of publication to the EPC, Air Permitting Section, at 1410 N. 21st Street, Tampa, Florida 33605 within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The EPC will issue the permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The EPC will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57, Florida Statutes (F.S.), or a party requests mediation as an alternative remedy under section 120.573, F.S. before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with sections 120.569 and 120.57, F.S.. The petition must contain the information set forth below and must be filed (received) in the Legal Department of the EPC at 1900 9th Avenue, Tampa, Florida 33605, (813) 272-5530, fax (813) 272-5605.

Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any other person must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the EPC's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the EPC's action or proposed action;

(d) A statement of the material facts disputed by the petitioner, if any;

(e) A statement of facts that the petitioner contends warrant reversal or modification of the EPC's action or proposed action;

(f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the EPC's action or proposed action; and

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wants the EPC to take with respect to the action or proposed action addressed in this notice of intent.

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

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

The application for a variance or waiver is made by filing a petition with the Legal Department of the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, FL 32399-3000. The petition must specify the following information:

(a) The name, address, and telephone number of the petitioner,

(b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any,

(c) Each rule or portion of a rule from which a variance or waiver is requested,

(d) The citation to the statute underlying (implemented by) the rule identified in (c) above,

(e) The type of action requested,

(f) The specific facts that would justify a variance or waiver for the petitioner,

(g) The reason by the variance or waiver would serve the purposes of the underlying statute (implemented by the rule), and

(h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing

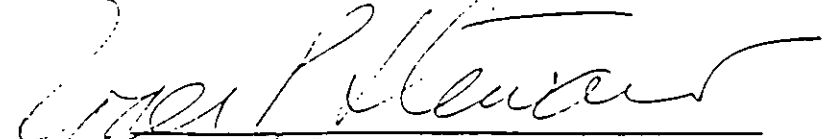
the duration of the variance or waiver requested.

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

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

Executed in Tampa, Florida

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY



Roger P. Stewart
Executive Director

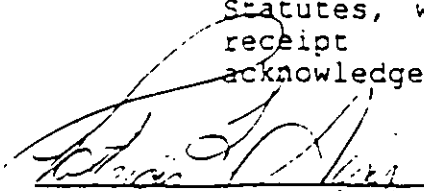
cc: Florida Department of Environmental Protection,
Southwest District
Frank J. Burbach, P.E., Lake Engineering, Inc.

CERTIFICATE OF SERVICE

The undersigned duly designated clerk hereby certifies that this INTENT TO ISSUE and all copies were mailed by certified mail before the close of business on FEB 11 1998 to the listed persons.

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to
Section 120.52(11), Florida
Statutes, with the designated clerk,
receipt of which is hereby
acknowledged.



clerk

2/11/98
Date

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY
NOTICE OF INTENT TO ISSUE PERMIT

The Environmental Protection Commission of Hillsborough County (EPC), as delegated by the Florida Department of Environmental Protection (DEP) gives notice of its intent to issue air pollution permit Nos. 0570057-002-AC, 0570057-008-AC, and 0570057-009-AC to Gulf Coast Recycling, Inc. 1901 N. 66th Street, Tampa, FL 33619 to address expansion of the facility and the Federal National Emission Standards for Hazardous Air Pollutants for secondary lead smelters for the operation located at 1901 N. 66th Street, Tampa, Hillsborough County.

A Best Available Control Technology (BACT) determination was not required.

A person whose substantial interests are affected by the EPC's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Legal Department of the EPC at 1900 9th Avenue, Tampa, FL 33605, within 14 days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

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

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the EPC's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the EPC with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this Notice in the EPC Legal Department at the above address. Failure to petition within the allowed time frame constitutes a waiver of any

right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 60Q-2.010, F.A.C.

The application and draft permit are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Environmental Protection Commission of Hillsborough County, 1410 N. 21st Street, Tampa, FL 33605.

COMMISSION

DOTTIE BERGER
JOE CHILLURA
CHRIS HART
JIM NORMAN
JAN PLATT
THOMAS SCOTT
ED TURANCHIK

EXECUTIVE DIRECTOR

ROGER P. STEWART



ADMINISTRATIVE OFFICES, LEGAL &
WATER MANAGEMENT DIVISION
1900 - 9TH AVENUE
TAMPA, FLORIDA 33605
TELEPHONE (813) 272-5960
FAX (813) 272-5157

AIR MANAGEMENT DIVISION
TELEPHONE (813) 272-5530

WASTE MANAGEMENT DIVISION
TELEPHONE (813) 272-5788

WETLANDS MANAGEMENT DIVISION
TELEPHONE (813) 272-7104

ENVIRONMENTAL PROTECTION COMMISSION OF
HILLSBOROUGH COUNTY, as Delegated by

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF PERMIT

Mr. Willis M. Kitchen
President
Gulf Coast Recycling, Inc.
1901 N. 66th Street
Tampa, FL 33619

Dear Mr. Kitchen:

Re: Hillsborough County - AP

Enclosed are Permit Numbers 0570057-002-AC/0570057-008-AC/0570057-009-AC which cover the entire facility and address the Lead RACT provisions required pursuant to Rule 62-296.600 F.A.C., the after-the-fact construction of the 60 ton blast furnace, expansion of the refining kettle output, replacement of equipment in the slag stabilization area, and the Maximum Achievable Control Technology Standards of 40 CFR 63 Subpart X issued pursuant to Section 403.087, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the EPC in the Legal Department at 1900 9th Avenue, Tampa, FL 33605; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the clerk of the EPC.

Executed in Tampa, Florida.

Sincerely,

DRAFT

Roger P. Stewart
Executive Director

cc: Florida Department of Environmental Protection
Frank J. Burbach, P.E., Lake Engineering, Inc.

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on _____ to the listed persons.

Clerk Stamp
FILED, on this date, pursuant to
Section 120.52(11), Florida
Statutes, with the designated clerk,
receipt of which is hereby
acknowledged.

Clerk

Date

COMMISSION

DOTTIE BERGER
JOE CHILLURA
CHRIS HART
JIM NORMAN
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ED TURANCHIK

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PERMITTEE:

Gulf Coast Recycling, Inc.
1901 N. 66th Street
Tampa, FL 33619

PERMIT/CERTIFICATION

Permit No.: 0570057-002-AC,
0570057-008-AC, and
0570057-009-AC

County: Hillsborough

Expiration Date: November 1, 2001

Project: Secondary Lead Smelting
Facility

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 62-204, 62-210, 62-212, 62-296, 62-297, and 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 EPC and made a part hereof and specifically described as follows:

For the modification of a secondary lead smelting facility to incorporate reasonably available control technology provisions for lead emissions, the after-the-fact construction of the 60 ton blast furnace, expansion of the refining kettle output, replacement of equipment in the slag stabilization area and the maximum available control technology standards of 40 CFR 63 Subpart X. The facility recycles spent automotive and industrial lead acid batteries to produce lead ingots. Batteries arrive by truck. The batteries are processed through an M. A. Industries Battery Recycling System. A series of equipment mechanically separates the large lead scrap and lead contaminated rubber scrap from the plastics for blast furnace feed. The plastic is taken off-site for recycling. Soda ash is mixed with the effluent to form lead carbonate which is then concentrated in a filter press and captured for charging. This process removes a significant portion of the sulfur from the furnace charge thus reducing SO₂ emissions out the furnace stack.

Battery groups are stored in piles in a partially enclosed structure. The blast furnace is used for the melting of battery group, plant scrap lead, coke, limerock, cast iron, and re-run slag. The furnace is charged via a skip hoist with a manually opened charge door at the top of the furnace. An agglomerating furnace is used to melt flue dust that is collected in the enclosed screw conveyor below the baghouse hoppers and fuses the particles together. The fused material is subsequently broken and re-fed to the blast furnace.

Lead and slag are both tapped and collected at the base of the furnace.

Lead is tapped to form buttons which are transported to the refining area. Refining lead includes producing soft lead, hard lead, and calcium lead which is accomplished in three 56-ton kettles all fired with natural gas. After refining is completed, drosses are removed and lead is cast into ingots. The dross is returned to the blast furnace.

Slag is stored and processed in an enclosed area. The slag is crushed and then mixed with cement or enviroblend to stabilize the slag. The resulting mixture is used for construction projects at the facility or disposed of off site.

Particulate matter and lead emissions from the blast and agglomerating furnace are controlled by a 25,000 ACFM ten compartment baghouse fabricated by Gulf Coast Recycling (GCR). It was modeled after a Wheelabrator-Frye Dustube Model 126, Series 55 shaker baghouse. Emissions from the blast furnace charging are captured by a hood and vented to a 9,000 ACFM two compartment shaker baghouse fabricated by GCR. The blast and agglomerating furnace tapping emissions are captured by a hood and vented to a 7,000 ACFM one compartment shaker baghouse similar in design to the previously mentioned baghouse. Particulate matter and lead emissions from the refining kettles are controlled by two Wheelabrator-Frye, Model 126 baghouses in parallel and exhausted through a common stack at a design flow rate of 17,000 ACFM. Emissions from the slag grinder are controlled by a 3,500 ACFM baghouse. Fugitive facility grounds are controlled through the use of water sprays, enclosures, reasonable precautions and specific work practices as specified in the specific conditions.

Emissions of carbon monoxide and volatile organic compounds from the furnace operations are controlled by the use of an afterburner.

Location: 1901 N. 66th Street, Tampa

UTM: 17-364.05 E 3093.5 N NEDS No.: 0057

Point ID:	01 - Furnace Exhaust
	02 - 3 Refining Kettles
	04 - Furnace Tapping
	06 - Furnace Charging
	07 - Slag Processing
	08 - Facility Grounds
	(including battery
	breaking operation)

Incorporates Permit No.: AC29-258634

DRAFT

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certificate No.: 0570057-002-AC,
0570057-008-AC, 0570057-009-AC
Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

1. A part of this permit is the attached General Conditions. [Rule 62-4.160, F.A.C.]
2. All applicable rules of the Environmental Protection Commission of Hillsborough County including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction. [Rule 62-4.070(7), F.A.C.]
3. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C., or any other requirements under federal, state, or local law. [Rule 62-210.300, F.A.C.]

Facility

4. The total emissions from the secondary lead smelting facility shall not exceed 32.3 tons of particulate matter, 300.0 tons of carbon monoxide, 167.0 tons of volatile organic compounds 683 tons of sulfur dioxide and 0.3 tons of lead for any consecutive twelve month period. Commencing July 1, 2001, sulfur dioxide emissions are to be reduced to 507 tons per any consecutive 12 month period. [Construction Permit Application and Rule 62-212.300, F.A.C.]
5. In order to ensure compliance with the emissions limitations of Specific Conditions No. 4:

- A) Hours of operation shall not exceed 7,800 hours for blast furnace operation, 6000 hours of refining operation, and 1664 hours for slag processing operation for any consecutive twelve month period. [Construction Permit Application]
- B) Process rates for each specified operation shall not exceed the following:

<u>Source</u>	<u>Process Rate</u>
Blast Furnace	4.5 tons charged/hour*
Refining Kettles	50 tons of lead scrap charged per batch per kettle
Slag Processing	6 tons of slag processed/hr.
Soda Ash Silo	40 tons per hour input

* Raw material charging rates on a daily basis shall be consistent with the following percentages: 88% lead scrap and re-run slag, 7% coke, 2.5% limerock, and 2.5% cast iron.

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PERMITTEE:
Gulf Coast Recycling, Inc.

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Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

6. The permittee shall not cause, suffer, allow or permit the discharge of air pollutant which cause or contribute to an objectionable odor. [Rule 62-296.320, F.A.C.]

Emissions Limitations (See Table I as Attached)

Furnace Operations (One blast furnace, one agglomerating furnace, and tapping and charging operations for the furnaces)

7. The permittee shall not discharge lead emissions to exceed the following:

- A) 2.0 mg/dscm (0.00087 gr/dscf) for the blast and the agglomerating furnaces, and the process fugitive sources consisting of the charging and the tapping vented to separate control equipment. Each vent must meet the standards by itself (no averaging). [40 CFR 63 Subpart X and Rule 62-204.800 F.A.C.]
- B) 0.010 gr/dscf for the blast and agglomerating furnaces [Rule 62-296.603, F.A.C.]
- C) 0.002 gr/dscf for the process fugitive sources consisted of the charging and tapping vented to separate control equipment [Rule 62-296.603, F.A.C.]

8. The permittee shall not discharge particulate matter emissions to exceed the following:

- A) 50 mg/dscm (0.022 gr/dscf) for the blast and agglomerating furnaces and process fugitive source baghouse exhausts. [40 CFR 60.122(a) and Rule 62-296.800 F.A.C.]
- B) 0.03 gr/dscf for the blast agglomerating furnaces and the process fugitive sources consisting of the charging and tapping vented to separate control equipment. [Rule 62-296.700, F.A.C.]

9. The permittee shall not discharge opacity to exceed the following:

- A) 3% at the exit of the control equipment controlling the furnace and the process fugitive sources. [Rule 62-296.603, F.A.C.]
- B) 6% from the charge door on the blast furnace during charging operations [Rule 62-296.603, F.A.C.]
- C) 3% from the closed charge door on the blast furnace during operation. [Rule 62.296.603, F.A.C.]

10. The permittee shall not discharge total hydrocarbons in excess of 360 PPM by volume, expressed as propane corrected to 4 percent CO₂, to the atmosphere from the blast furnace [40 CFR 63 Subpart X and Rule 62-204.800, F.A.C.]

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PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certificate No.: 0570057-002-AC,
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Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

11. The permittee shall not discharge total hydrocarbons greater than 0.20 kilograms per hour (0.44 pounds per hour) to the atmosphere from the process fugitive sources consisting of the charging and the tapping vented to separate control equipment. [40 CFR 63 Subpart X and Rule 62-204.800, F.A.C.]

12. The permittee shall not discharge more than 68 pounds per hour of carbon monoxide to the atmosphere from the blast and the agglomerating furnaces. [Construction Permit Application and Rule 62-212.300, F.A.C.]

13. In order to ensure compliance with the emission limiting standards of Specific Condition Nos. 10 and 12, the permittee shall install, maintain and operate a natural gas - fired afterburner with a minimum temperature of 1400°F and 0.5 seconds residence time to achieve a 90% destruction efficiency for both carbon monoxide and hydrocarbons. [Construction Permit Application, 40 CFR 63 Subpart X, and Rule 62-212.300, F.A.C.]

14. Prior to July 1, 2001, the permittee shall not discharge more than 175 pounds per hour of sulfur dioxide from the blast and the agglomerating furnaces. After June 30, 2001, the permittee shall not discharge more than 130 pounds per hour sulfur dioxide from these same two furnaces. [Construction Permit Application and Rule 62-212.300, F.A.C.]

15. In order to ensure compliance with the emission limiting standard of Specific Condition No. 14, the permittee shall install, maintain and operate a M. A. Industries Model 41 Desulfurization System to process all incoming batteries prior to charging to the furnace. If the EPA Method No. 6 test required under Specific Condition No. 29 does not demonstrate compliance with the 175 pounds of sulfur dioxide per hour standard, the permittee shall immediately reduce the furnace charge rate to 4.58 tons per hour until such time they can demonstrate compliance at the higher rate. Within 6 months of a failed compliance demonstration, the permittee shall install paste repulping and refiltering equipment referred to in M. A. Industries letter of December 4, 1995, or take other alternate measures to reduce emissions below the 175 pound standard. Alternate measures must be prepared under the direction of a professional engineer registered in the State of Florida, and must have prior approval from the EPC. Installation of the paste repulping and refiltering equipment does not relieve the permittee from having to meeting the 175 pound per hour standard.

16. The process fugitive sources consisting of the charging and the tapping of the blast furnace shall be ventilated to maintain a face velocity of at least 90 meters per minute (300 fpm) at all hood

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Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

openings, or shall be located in a total enclosure that is ventilated to achieve air velocity into the enclosure at doorway openings of not less than 75 meters per minute (250 fpm). All such exhaust shall be directed to control equipment that shall not discharge lead in excess of the limitations in Specific Condition 7.A. [40 CFR 63 Subpart X and Rule 62-204.800, F.A.C.]

Refining Operation (3 natural gas fired 56-ton refining kettles and associated pigging machines)

17. The permittee shall not discharge lead emissions to exceed the following:

- A) 0.0002 gr/dscf [Rule 62-296.603(1)(d), F.A.C.]
- B) 2.0 mg/dscm (0.00087 gr/dscf). [40 CFR Subpart X and Rule 62-204.800, F.A.C.]

18. No more than two 56-ton refining kettles shall be operated at a time. [Construction Permit Application]

19. The permittee shall not discharge opacity from the refining kettle operation in excess of 3% [Rule 62-296.603, F.A.C.]

20. The refining kettles and the associated pigging machines shall be ventilated to maintain a face velocity of 75 meters per minute (250 fpm) or shall be located in a total enclosure that is ventilated to achieve air velocity with the enclosure at doorway openings of not less than 75 meters per minute (250 fpm). All such exhaust shall be directed to control equipment that shall not discharge lead in excess of the limitations in Specific Condition 17.B [40 CFR 63 Subpart X and Rule 62-204.800, F.A.C.]

21. The refining kettles shall be fired only with natural gas at a maximum heat input rate of 4.0 MMBTU/hr. per kettle. [Construction Permit Application]

22. The permittee shall not discharge particulate matter emissions from the lead refining area baghouse to exceed 0.03 gr/dscf, 3.46 pounds/hr. and 10.44 tons per any 12 consecutive month period [Rule 62-296.700, F.A.C. and Construction Permit Application]

23. Maximum production from the refining kettles shall not exceed 30,000 tons/yr. of finished lead. [Construction Permit Application and Rule 62-4.070, F.A.C.]

24. Any time that a kettle is being heated to refine lead or to bring it to temperature prior to receiving a charge of lead or it contains a charge of lead irregardless of whether heat is being applied, the

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certificate No.: 0570057-000-AC,
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Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

kettle shall be vented to the baghouse and the baghouse shall be operational. This time shall count towards the 6,000 hours allowed during any twelve (12) month consecutive month period. [Construction Permit Application and Rule 62-4.070(3), F.A.C.]

Miscellaneous Operations (Slag handling and processing, battery cracking operation)

25. The permittee shall not discharge emissions to exceed the following: [Rule 62-296.603(e) and (f), F.A.C.]

- A) 3% opacity for the battery cracking operations.
- B) 0.000333 gr of lead/dscf for the slag handling and processing operations which includes receiving hopper and conveyor drop/crusher sources collectively.
- C) 3% opacity for the entire slag handling and processing operations which include receiving hopper and conveyor drop/crusher collectively and the structure housing the processing operation.
- D) 5% opacity from the soda ash silo

26. Particulate matter emissions from the slag handling and processing operation and the soda ash silo shall be less than one ton per year in order to exempt these operations from the particulate RACT. [Rule 62-296.700(2)(c), F.A.C.]

27. The average lead content of the slag processed shall not exceed 7% lead by weight on an annual basis. (The range of lead content is usually 5 to 9% lead by weight.) Only slag generated on-site may be processed. [Construction Permit Application and Rule 62-4.070 (3), F.A.C.]

Fugitives, Confined and Unconfined Sources

28. No owner or operator of a lead processing operation shall cause, allow, or permit the emissions of lead, including emissions of lead from vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrial-related activities such as loading, unloading, charging, melting, tapping, casting, storing or handling, unless reasonably available control technology and maximum available control technology are employed to control such lead emissions. RACT and MACT measures shall include but not be limited to the following: [Rule 62-296.601(2), F.A.C., 40 CFR 63 Subpart X, Consent Order of September 4, 1996, and Construction Permit Application]

- A) Maintain slide gates in the exit of the baghouse hoppers to

PERMITTEE:
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SPECIFIC CONDITIONS:

- prevent the re-entrainment of dust collected in the screw conveyor on the hygiene baghouses.
- B) Maintain enclosed screw conveyor below the furnace baghouse hoppers to prevent re-entrained dust.
 - C) Maintain wind breaks and panels installed along bottom of the agglomerating furnace, southside of the furnace baghouse support structure, south and west sides of group pile storage building, and windbreak installed along the entire south property boundary.
 - D) Prohibit vehicular traffic on unpaved areas.
 - E) Maintain vegetation coverage on all of the unpaved plant grounds.
 - F) Three times daily, regardless of plant operation, vacuum paved areas using a HEPA filter equipped vacuum except when natural precipitation makes it impractical.
 - G) Maintain a tire wash for frontend loader at the entrance of the group pile storage building to prevent tracking of lead bearing materials outside the area.
 - H) Eliminate slag transfer with frontend loader through the plant. Store, handle, and process slag in enclosed structures.
 - I) Use only trained personnel for furnace operations.
 - J) Maintain the sprinkler system and operate it in accordance with the attached sprinkler plan. (Attachment A)
 - K) Maintain partial enclosure of the battery storage piles and water them with sufficient frequency and quantity to prevent the formation of dust.
 - L) Vacuum the pavement in the battery breaking area with a HEPA filter equipped vacuum at least twice a day.
 - M) Maintain the partial enclosure in the furnace area.
 - N) Vacuum the pavement in the furnace area with a HEPA filter equipped vacuum or wet pavement with water at least twice a day.
 - O) Maintain the partial enclosure in the refining area.
 - P) Vacuum the pavement in the refining area with HEPA filter equipped vacuum or water at least twice a day.
 - Q) Maintain partial enclosure with wet suppression for the storage of any lead bearing materials and a vehicle wash at the exit of the area, or total enclosure in a structure meeting the requirements of 40 CFR 265.1101(a) and (c) and ventilation to a control device and a vehicle wash at the exit the area. The discharge from that control device may not contain lead compounds in excess of 20 mg/dscm (0.00087/gr/dscf).
 - R) Maintain daily records of all wet suppression, pavement cleaning and vehicle washing activities as per the attached "Fugitive Dust Control Standard Operating Procedures Manual."

PERMITTEE:
Gulf Coast Recycling, Inc.

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Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

Testing Methods and Procedures

29. In order to meet the requirements of 40 CFR 63.7, and the non-PSD portion of this permit, test the emissions for the following pollutant(s) prior to June 19, 1998 and submit 2 copies of the Air Compliance Section of the Air Management Division of the Environmental Protection Commission of Hillsborough County within 45 days of such testing. Testing procedures shall be consistent with the requirements of the 40 CFR 63 and Rule 62-297, F.A.C.:

Blast and Agglomeration Furnace Exhaust Stack

(X) Pb	(X) Hydrocarbons (Inlet and Outlet of Afterburner)
(X) PM	(X) Opacity
(X) Carbon Monoxide (Inlet and Outlet of Afterburner)	(X) Sulfur Dioxide

Process Fugitive Source Stacks (Tapping, Charging and Refining Kettles)

(X) Pb	(X) Opacity
(X) PM	(X) Hydrocarbons (Tapping & Charging Only)

Slag Stabilization Stack

(X) Pb	(X) Opacity
(X) PM	

Blast Furnace Tapping Enclosure

(X) Opacity	(X) Face Velocity
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Blast Furnace Charging Enclosure

(X) Opacity (Open and Closed Doors)	(X) Face Velocity
-------------------------------------	-------------------

Agglomeration Furnace Tapping Enclosure

(X) Opacity	(X) Face Velocity
-------------	-------------------

Refining Kettles and Pigging Machines Enclosures

(X) Opacity	(X) Face Velocity
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PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certificate No.: 0570057-002-AC,
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SPECIFIC CONDITIONS:

Battery Cracking Enclosure

(X) Opacity

30. Compliance with the emission limitations of Specific Condition Nos. 4, 7, 8, 9, 10, 11, 12, 13, 14, 16, 17, 19, 20, 22, 25, and 26 shall be demonstrated using the EPA test methods 1, 2, 3, 4, 5, 6, 9, 10, 12, and 25A contained in the 40 CFR 60, Appendix A and adopted by reference in Rule 62-297, F.A.C., also the requirements of 40 CFR 63.547 must be met. The minimum requirements for stack sampling facilities source sampling and reporting, shall be in accordance with Rule 62-297, F.A.C., 40 CFR 60, Appendix A and 40 CFR 63. In the case of the Method 9, all readings shall be at least 30 minutes in duration and concurrent with one of the Method 12 runs.

31. The permittee shall provide at least the minimum requirements for stack sampling facilities as specified in 40 CFR 60.8(e)(1), (2), (3) and (4), 40 CFR 63.7, and Rule 62-297, F.A.C. Sources sampling platforms, platform access, and other associated work areas, whether permanent or temporary, shall be in accordance with Occupational Safety and Health Administration standards per 29 CFR 1910, Subparts D and E.

32. Testing of emissions shall be conducted with the source operating at capacity with conditions representative of normal operations. Capacity is defined as 90-100% of rated capacity as specified in Specific Condition No. 5. If it is impracticable to test at capacity, then the source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the EPC. For the blast furnace and refining kettles, the type and amounts of materials charged during the test must also be included. Testing of refining operation must be accomplished while two kettles are operating. Failure to submit the input rates control equipment parameters such as pressure drops and afterburner temperatures and actual operating conditions may invalidate the test. [Rule 62-4.071, F.A.C.]

33. The permittee shall notify the Air Compliance Section of the Environmental Protection Commission of Hillsborough County at least 60 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 contact person who will be responsible for coordinating and having such test conducted. Along with the notification, the permittee shall submit a site-specific test plan to include a test program summary, the schedule, data quality objectives, and both the internal and the external quality assurance program. [40 CFR 63.7]

PERMITTEE:
Gulf Coast Recycling, Inc.

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Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

34. Permittee shall analyze performance audit samples during each performance test. The audit samples shall be requested by the permittee at least 45 days prior to the test date. [40 CFR 63.7]

35. Records of the initial performance tests required by the permit shall be retained by the permittee for a minimum of 5 years and made available upon request [40 CFR 63.7]

36. Visible emission tests, in part, must be conducted in accordance with the following requirements: [Rule 62-296.600, F.A.C.]

- A) The visible emission tests on the lead refining area baghouse and the building shall be at least thirty (30) minutes in duration pursuant to Rule 62-297, F.A.C., and shall be conducted concurrent with one of the Method 12 runs.
- B) The visible emission test on the blast furnace shall be thirty (30) minutes in duration pursuant to Rule 62-297 F.A.C., and shall be conducted concurrent with one of the Method 12 runs.
- C) The visible emission tests on the blast furnace charging operation shall each be thirty (30) minutes in duration, pursuant to Rule 62-297.330 F.A.C. Readings shall be taken on the:
 - 1) Charge door on the blast furnace during charging (closest potential emission point).
 - 2) Closed charge doors on the blast furnace during furnace operation (closest potential emission point).
 - 3) Baghouse exhaust during blast furnace operation.
- D) The visible emission test on the blast furnace tapping shall be thirty (30) minutes in duration pursuant to Rule 62-297.330, F.A.C. Readings shall be taken only during product tapping on the baghouse exhaust and on the tapping doors.

37. When the Environmental Protection Commission of Hillsborough County EPC, after investigation, has good reason such as complaints, increased visible emissions or questionable maintenance of control equipment, to believe that any applicable emission standard contained in Rule 62-310, 62-312, 62-292, 62-296, or 62-297, F.A.C., or in a permit issued pursuant to those rules is being violated, it may require the owner of the source to conduct compliance tests which identify the nature and quantity of pollutant emissions from the source and to provide a report on the results of said tests to the EPC. [Rule 62-297,340(2), F.A.C.]

Monitoring and Record Keeping

38. By June 22, 1998, the permittee shall submit a single operation.

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certificate No.: 0570057-002-AC,
0570057-008-AC, 0570057-009-AC
Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

and maintenance plan to meet the particulate RACT requirements of Rule 62-296.700, F.A.C.; the lead RACT requirements of Rule 62-296.600, F.A.C.; and the MACT requirements of 40 CFR 63.548 (Attachment C in part). These three rules all require certain operation and maintenance provisions and those requirements must be met immediately. This Specific Condition simply requires the permittee to combine the plans into a single document and submit it for incorporation into the Title V permit.

39. The permittee shall install, calibrate and maintain a device to monitor and to record the temperature in the afterburner chamber on a continuous basis; or shall monitor and record the temperature in the afterburner every 15 minutes while the source is in operation. If the temperature falls more than 50°F below the 3 hour average during the hydrocarbon compliance demonstration, it shall constitute a violation of the applicable emission standard listed in this permit. [40 CFR 63.548(h)]

40. Within 45 days of conducting the compliance test required under Specific Condition No. 29, the permittee shall submit a complete notification of compliance status along with the test report. [40 CFR 63.9(h)]

41. Excess emissions resulting from the start-up, shutdown or malfunction of any emissions unit shall be permitted provided best operational practices to minimize emissions are adhered to. For sulfur dioxide control, best operational practice shall mean that no battery processing will be done unless the desulfurization equipment is operational. For hydrocarbon and carbon monoxide control, best operational practice shall mean the furnace operation can continue for up to 3 hours in which the afterburner falls less than 50°F below the average temperature recorded in the last compliance test. If the temperature falls more than 50° for up to one hour, the furnace operation shall cease. For particulate and lead control, best operational practices shall mean the emission unit can continue for up to two hours following the alarm being triggered for a broken bag. After 2 hours, the cell where the broken bag is located shall be sealed off, or the bag will have been replaced to continue operation of that particular emission unit. If a compartment is sealed off while the emission unit is operated for any period of time, the EPC may request a compliance demonstration under equivalent conditions. [Rule 62-210.700]

42. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(3)]

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certificate No.: 0570057-002-AC,
0570057-008-AC, 0570057-009-AC
Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

43. If an excess emission occurs, the permittee shall file a report semiannually covering the periods January to June and July to December within 30 days of the period. The report shall be consistent with the requirements of 40 CFR 63.10(d)(5)(i). If the action taken is not consistent with the permittee's startup, shutdown, and malfunction plan, the more immediate reporting requirements of 40 CFR 63.10(5)(d)(ii) shall apply.

44. Within 270 days of receipt of this permit or by December 1, 1998, whichever occurs first, the permittee shall install, calibrate, and maintain a continuous emission monitor for the pollutant sulfur dioxide on the furnace exhaust line. The monitor shall meet the requirements of 40 CFR 60 Appendix A Performance Specification 2 and 40 CFR 60 Appendix F. Initial certification shall be completed within 90 days of installation. Following the initial certification, the permittee may request that the continuous emission monitor become the referenced method by requesting an alternate sampling procedure pursuant to Rule 62-297.620, F.A.C. [Rule 62-4.070(3), F.A.C.]

45. The permittee shall maintain and calibrate elapsed time meters on all the emission units covered under this permit. The meters shall be accurate within 10 percent (10%) and used to keep the records required by Specific Condition No. 47. [Rule 62-4.070(3), F.A.C.]

46. The permittee shall maintain and calibrate a device which continuously measures and records the pressure drop across the baghouses controlling the emission units covered under this permit. [Rule 62-4.070(3), F.A.C.]

47. The permittee shall maintain a record from the elapsed time meters for each emission unit recording the reading and listing the hours on a monthly and 12 consecutive month basis. [Rule 62-4.070(3), F.A.C.]

48. The permittee shall keep a record on the material input to the blast furnace for each and every hour and back calculate a ton per hour input figure. [Rule 62-4.070(3)]

49. All record keeping required by this permit shall be maintained for a least five years by the permittee and made available to the EPC upon request. [40 CFR 63 Subpart X]

50. Submit to the Environmental Protection Commission of Hillsborough County each calendar year on or before March 1, completed DEP Form 62-210.900(4), "Annual Operating Report for Air Pollutant Emitting Facility", for the preceding calendar year. [Rule 62-210.370(3), F.A.C.]

51. Notwithstanding any of the other Specific Conditions of this

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certificate No.: 0570057-002-AC,
0570057-008-AC, 0570057-009-AC
Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

permit, the following Subparts of 40 CFR 63 A shall apply to this permittee: 63.1; 63.2; 63.3; 63.4; 63.5; 63.6(a), (b), (c), (e), (f), (g), (i), and (j); 63.7; 63.8; 63.9(a), (b), (c), (d), (e), (g), (h)(1-3), h(5-6), and (j); 63.10; and 63.12-15.

Concluding Conditions

52. The permittee shall provide timely notification to the Environmental Protection Commission of Hillsborough County prior to implementing any changes that may result in a modification to this permit pursuant to Rule 62-210.200(187), F.A.C., Modification. The changes do not include normal maintenance, but may include, and are not limited to, the following, and may also require prior authorization before implementation: [Rules 62-210.300 and 62-4.070(3), F.A.C.]

- A) Alteration or replacement of any equipment or major component of such equipment.
- B) Installation or addition of any equipment which is a source of air pollution.

53. If the permittee wishes to transfer this permit to another owner, an "Application for Transfer of Permit" (DEP Form 17-1.201(1)) shall be submitted, in duplicate, to the Environmental Protection Commission of Hillsborough County within 30 days after the sale or legal transfer of the permitted facility. [Rule 62-4.120, F.A.C.]

54. Within 45 days of completion of the testing required by Specific Condition No. 27, the permittee shall submit a revised Title V application (two copies) to address the limitations of this permit and the physical and operational changes made at the facility to comply with them.

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

DRAFT

Roger P. Stewart
Executive Director

TABLE I

ALLOWABLE EMISSIONS

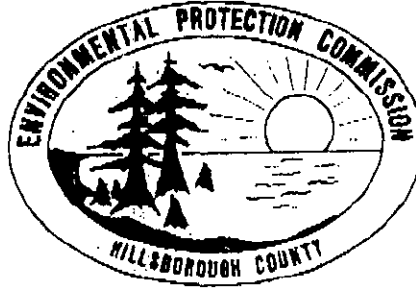
	HI			Opacity	Pb		NOx TPY	VOC			CO		SO ₂ - Prior to 7/01/2001		SO ₂ - Commencing 7/01/2001	
	gr/dscf	lb/hr	TPY		gr/dscf	TPY		PPM	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
FURNACE OPERATIONS																
Blast and Agglomerating Furnaces	0.022	3.71	14.0	3%	0.00087	0.14	NA	360		167.0	60	300	175	683	130	507
Tapping Operations	0.022	0.57	2.2	3%	0.00087	0.02	NA		0.44	1.72		NA		NA		NA
Charging Operations	0.022	1.31	5.1	3%	0.00087	0.05	NA					NA		NA		NA
REFINING OPERATIONS																
(3) Refining Kettles	0.03	3.18	10.13	3%	0.0002	0.08	NA			NA		NA		NA		NA
MISCELLANEOUS																
Slag Processing				3%	0.0000333	0.00	NA			NA		NA		NA		NA
Facility Grounds and Miscellaneous Operations				3%												
Soda Ash Silo				5%												
TOTALS						<0.3	NA			168.7		300		683		507

COMMISSION

DOTIE BERGER
JOE CHILLURA
CHRIS HART
JIM NORMAN
JAN PLATT
THOMAS SCOTT
ED TURANCHIK

EXECUTIVE DIRECTOR

ROGER P. STEWART



ADMINISTRATIVE OFFICES, LEGAL &
WATER MANAGEMENT DIVISION
1900 - 9TH AVENUE
TAMPA, FLORIDA 33605
TELEPHONE (813) 272-5960
FAX (813) 272-5157

AIR MANAGEMENT DIVISION
TELEPHONE (813) 272-5530

WASTE MANAGEMENT DIVISION
TELEPHONE (813) 272-5788

WETLANDS MANAGEMENT DIVISION
TELEPHONE (813) 272-7104

MEMORANDUM

DATE: May 30, 1997

TO: Clair Fancy

FROM: Jerry Campbell *JC*

SUBJECT: Gulf Coast Recycling (GCR)

You and I discussed GCR's PSD application with Dick Dubose at the grants meeting in Atlanta and we appear to have come to a consensus. If GCR agrees to do whatever it takes to achieve a 75% reduction in SO₂ emissions from their blast furnace, then the Department will allow them to withdraw their PSD application. The reduction will be made enforceable by revising the current Consent Order between the EPC and GCR, as well as requiring GCR to get a federally enforceable State construction permit from the EPC.

Dick concurred with this source of action, so we should be clear to proceed. I had verbally communicated our intent to GCR's attorney before our meeting, and advised them the Department would be following up in writing. Thanks for your assistance and lets hope this resolves the matter.

bm





GULF COAST RECYCLING, INC.

1901 NORTH 66th STREET • TAMPA, FLORIDA 33619
PHONE: (813) 626-6151 FAX: (813) 622-8388

CONFIDENTIALITY NOTE

The information contained in this facsimile message is legally privileged and confidential information intended only for use of the individual or entity named below. If the reader of this message is not the intended recipient, you are hereby notified that any dissemination, distribution or copy of this telecopy is strictly prohibited. If you have received this telecopy in error, please immediately notify us by telephone and return the original message to us at the address above via the postal service. Thank you.

TELECOPY TRANSMITTAL

TO: John Reynolds
COMPANY: FDEP
FROM: George Townsend
TELECOPY NO: 1-904-922-0979
CONFIRMATION NO: _____
DATE: 5/29/97 TIME: _____ AM PM
TOTAL NUMBER OF PAGES
(INCLUDING COVER SHEET) 2

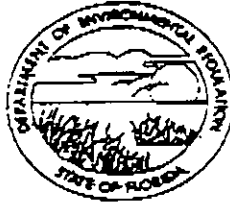
COMMENTS/SPECIAL INSTRUCTIONS

SENT BY: _____ CONFIRMED BY: _____

Should you have any problems receiving this telecopy, please call (813) 626-6151.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
1600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301



BOB GRANAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

WAIVER OF 90 DAY TIME LIMIT
UNDER SECTIONS 120.60(2) AND 403.0876, FLORIDA STATUTES

License (Permit, Certification) Application No. PSD-FL-215(0570057-002-AC)

Applicant's Name: Gulf Coast Recycling, Inc.

The undersigned has read Sections 120.60(2) and 403.0876, Florida Statutes, and fully understands the applicant's rights under that section.

With regard to the above reference license (permit, certification) application, the applicant hereby with full knowledge and understanding of (his) (her) (its) rights under Sections 120.60(2) and 403.0876, Florida Statutes, waives the right under Sections 120.60(2) and 403.0876, Florida Statutes, to have the application approved or denied by the State of Florida Department of Environmental Regulation within the 90 day time period prescribed in Sections 120.60(2) and 403.0876, Florida Statutes. Said waiver is made freely and voluntarily by the applicant, is in (his) (her) (its) self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Regulation.

This waiver shall expire on the 15th day of August 1997.

The undersigned is authorized to make this waiver on behalf of the applicant.

Willis M. Kitchen
Signature

Willis M. Kitchen, President

Please Type Name of Signee

May 27, 1997
Date

Sworn to and subscribed
before me this 27th day
of May 1997.

[Handwritten Signature]

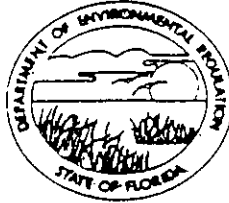


Karen Sue Erickson
My Commission CCS04225
Expires August 7, 1998

DER Form 17-1.201(8)
Effective November 30, 1982

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
1600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

RECEIVED

MAY 30 1997

BUREAU OF
AIR REGULATION

WAIVER OF 90 DAY TIME LIMIT
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Signature

Willis M. Kitchen, President

Please Type Name of Signee

May 27, 1997

Date

Sworn to and subscribed
before me this 27th day
of May 1997.

Karen Sue Erickson

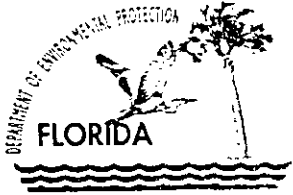


Karen Sue Erickson
My Commission CC804226
Expires August 7, 1998

DER Form 17-1.201(8)

Effective November 30, 1982

Page 1 of 2



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

May 20, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Willis M. Kitchen, President
Gulf Coast Recycling, Inc.
1901 North 66th Street
Tampa, Florida 33619

RE: Blast Furnace Construction Permit PSD-FL-215 (0570057-002-AC)

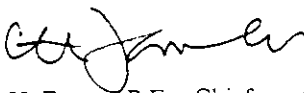
Dear Mr. Kitchen:

As a result of recent discussions with staff of the Environmental Protection Commission of Hillsborough County (EPCHC), the Department is willing to forego requiring the after-the-fact PSD construction permit for the blast furnace if Gulf Coast Recycling will agree to install the paste repulping and refiltering equipment mentioned in M.A. Industries' letter dated December 4, 1995, in the event that the desulfurization unit does not consistently achieve at least 75% sulfur removal. This can be handled by way of an amendment to the Consent Order that Gulf Coast executed with the EPCHC on August 28, 1996, and a non-PSD construction permit issued by the EPCHC.

Based on a rough estimate from M.A. Industries, the capital cost of an additional tank, agitator, and pumps along with a filter press would be about \$250,000 contributing toward an incremental annualized cost of about \$20,000. This results in an incremental cost effectiveness of less than \$100 per additional annual ton of sulfur removed, based on an increase from 66% to 77% removal. Since one ton of sulfur generates two tons of SO₂, this is equivalent to \$50 per ton of SO₂ removed which is well below the Department's acceptable cost guidelines for add-on BACT equipment.

By copy of this letter, the Department is requesting that the EPCHC contact you promptly to determine if this matter can be resolved in this way. If there are any questions concerning this letter, please contact John Reynolds or Al Linero at (904)488-1544.

Sincerely,



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

CHF/jr

c: J. Campbell, EPCHC
B. Thomas, SWD
B. Beals, EPA Region IV
L. Carlson, Lake Eng.
S. Smallwood, ERM

Fold at line over top of envelope to the right of the return address

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

Is your RETURN ADDRESS completed on the reverse side?

3. Article Addressed to:
 Mr. Willis M. Kitchen, Pres.
 Gulf Coast Recycling
 1901 N. 66th Street
 Tampa, FL 33619


4a. Article Number
 P 339 251 191

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

7. Date of Delivery
 5-27-97

5. Received By: (Print Name)

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

6. Signature: (Addressee or Agent)


Thank you for using Return Receipt Service.

PS Form 3811, December 1994

Domestic Return Receipt

P 339 251 191

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to
 Willis Kitchen
 Street & Number
 Gulf Coast Re.
 Post Office, State, & ZIP Code
 Tampa, FL

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$

PS Form 3800, April 1995

Postmark or Date
 5-23-97
 0570057-002-AC
 PSD-FI-215

Revised

**DIVISION OF AIR RESOURCES MANAGEMENT
BUREAU OF AIR REGULATION
NEW SOURCE REVIEW SECTION
Telephone (904) 488-1344
Fax (904) 922-6979**

**TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION**

Gulf Coast Recycling, Inc.

Blast Furnace

Facility ID No. :0570057

Tampa, Florida
Hillborough County

Air Construction Permit No. 0570057-001-AC
PSD-FL-215

May, 1997

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. APPLICATION INFORMATION

1.1 Applicant Name and Address

Gulf Coast Recycling, Inc.
1901 North 66th Street
Tampa, Florida 33619

Authorized Representative
Mr. Willis M. Kitchen, President

1.2 Reviewing and Process Schedule

10-11-95: Date of Receipt of Application
12-01-96: Application Complete

2. FACILITY INFORMATION

2.1 Facility Location

Gulf Coast Recycling, Inc. is approximately XX kilometers (N,S,E,W) of the XX, a Class X PSD Area. The UTM: coordinates of this facility are Zone 17 ; 364.0 km E ; 3093.6 km N.

2.2 Standard Industrial Classification Code (SIC)

Major Group No.		
Group No.		
Industry No.		Secondary Metal Production

2.3 Facility Category

The secondary metal production industry is on the list of the 28 Major Facility Categories per Chapter 62, Table 62-212.400-1, F.A.C. Since potential emissions from the facility exceed 100 tons per year (TPY) of sulfur dioxide (SO₂), carbon monoxide (CO) and volatile organic compounds (VOCs), this is a major facility according to Rule 62-210.200(171), F.A.C. and is a major Title V Source of Air Pollution per Rule 62-210.200(173).

3. PROJECT DESCRIPTION

3.1 This permit addresses the following emissions units:

EMISSION UNIT NO.	SYSTEM	EMISSION UNIT DESCRIPTION
ARMS No.		
ARMS No.		

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

3.2 Background Information

The permitting and related history of this project is summarized below:

June 2, 1983	GCR requested exemption from RACT PM limits since < 15 TPY.
Oct. 1983	EPCHC decided not to require a permit for construction of a new blast furnace but that baseline testing would be required prior to construction to determine if SO ₂ emissions would trigger PSD.
Dec. 1983	Baseline emission testing conducted for SO ₂ from the old blast furnace.
Jan. 26, 1984	Renewal permit issued reflecting requirement for baseline SO ₂ testing.
Dec. 4, 1984	New permit recommended requiring second SO ₂ test to determine if PSD significant increase was triggered by construction of new blast furnace.
Jan. 28, 1985	Operating permit AO29-95365 issued.
July 17, 1990	Renewal permit issued with SO ₂ limit based on 1983 baseline plus 40 TPY.
Nov. 19, 1990	Modification of permit ?
June 19, 1991	EPA determined that a PSD construction permit should have been required in 1983 and should be issued after-the-fact.
Oct. 15, 1991	GCR signed Consent Order with EPCHC requiring filing of PSD application and GCR's compliance plan for blast furnace emissions.
Nov. 24, 1992	GCR application for after-the-fact permit forwarded to BAR-Tallahassee by EPCHC for PSD processing. EPCHC notified GCR that application was incomplete.
Mar. 11, 1993	DEP staff met with GCR and EPCHC to discuss status of application.
Apr. 22, 1993	DEP letter to GCR outlining requirements for filing a complete application.
May 31, 1994	GCR submitted PSD application to DEP.
June 28, 1994	DEP mailed incompleteness letter.
April 20, 1995	DEP mailed followup letter with deadline of May 26, 1995 for submitting the requested information.
May 11, 1995	GCR responded to incompleteness letter by requesting additional time to investigate new technologies for lead recovery and desulfurization.
Aug. 24, 1995	DEP drafted Intent to Deny Permit for failure to submit information requested.
Aug. 28, 1995	GCR notified DEP of its intentions to install desulfurization equipment by October 1996 in advance of DEP's BACT determination.
Aug. 29, 1995	GCR submitted a request for an increase in allowable blast furnace charge rate from 4.58 to 6.50 tons per hour without increasing the allowable emission limits which would not be exceeded because they are substantially higher than actual emissions.
Sep. 8, 1995	DEP mailed Intent to Deny Permit due to lack of a timely response to request for additional information.
Sep. 29, 1995	GCR filed request for extension of time to file petition for administrative hearing.
Oct. 6, 1995	GCR contacted the Chief of the Bureau of Air Regulation by phone and obtained agreement not to deny the permit in return for supplying the requested information within 30 days.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Oct. 11, 1995 GCR submitted a response to the request for additional information along with a revised application incorporating GCR's proposal to install desulfurization as BACT for SO₂ removal and an afterburner for VOC control.

Oct. 17, 1995 GCR provided DEP with written notification of NESHAPS applicability as a major source under Subpart X as required by 40CFR63.9(b), indicating a compliance date of June 23, 1997.

Oct. 27, 1995 GCR submitted refined modeling that was required in DEP's June 28, 1994 letter.

Nov. 21, 1995 DEP requested additional information regarding the revised application submitted on October 11, 1995 with respect to GCR's proposed new desulfurization and afterburner projects.

Nov. 27, 1995 EPCHC submitted comments on GCR's revised application.

Dec. 4, 1995 USDOJ submitted comments on GCR's revised application.

Dec. 11, 1995 GCR filed third request for extension of time to file petition for hearing.

Jan. 10, 1996 GCR submitted responses to DEP's Nov. 21, 1995 request for information and to EPCHC's comments of Nov. 27, 1995.

Feb. 7, 1996 EPCHC submitted comments on GCR's Jan. 10 submittal.

Feb. 8, 1996 DEP wrote followup letter to GCR pointing out information still incomplete.

Feb. 9, 1996 GCR filed fourth request for extension of time to file petition for hearing.

Mar. 15, 1996 GCR responded to DEP's Feb. 8 letter by providing additional information.

Mar. 28, 1996 Meeting of DEP, EPCHC and GCR representatives was held in Tallahassee.

Apr. 4, 1996 EPCHC sent letter to GCR requesting additional information for EPCHC's BACT proposal for SO₂ control.

May 31, 1996 GCR responded to EPCHC's Apr. 4 letter and provided BACT cost data.

Jun. 11, 1996 DEP wrote followup letter to GCR concerning the March 28 meeting and the fact that the revised application was still incomplete.

Jun. 24, 1996 GCR submitted a restatement of its position on the issues as its response to DEP's June 11 letter.

Jun. 24, 1996 EPCHC denied GCR's Mar. 25, 1996 soda ash silo construction permit application since the silo is part of the desulfurization project which is tied to DEP's BACT determination for the blast furnace.

Jul. 16, 1996 DEP responded to GCR's June 24 restatement of its position by foregoing any further information requests from GCR while attempting to obtain the necessary information from other sources.

Jul. 22, 1996 GCR notified DEP by letter that a contract had been entered into for installing desulfurization at a guaranteed sulfur removal rate of 66%. GCR acknowledged that the 66% removal rate will not meet BACT requirements but that 75% removal would and that 75% could be achieved within four years. GCR requested that the PSD permit application be processed under the innovative control technology provisions of Rule 62-212.400(3)(f)4., F.A.C. as a temporary exemption from PSD requirements.

Jul. 25, 1996 DEP responded to GCR's July 22 letter explaining that Rule 62-212.400(3)(f)4., providing for a temporary exclusion from increment consumption, could not be applied to desulfurization as an innovative technology since the standard desulfurization process has been adequately demonstrated as a proven

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

technology. DEP also confirmed that 75% removal has not been determined as BACT.

Aug. 15, 1996 GCR executed a waiver of the permit processing clock until Dec. 5, 1996.

Sep. 4, 1996 EPCHC negotiated a consent order with GCR allowing installation of desulfurization and the afterburner project while addressing recent emission violations.

Sep. 5, 1996 DEP permit engineer toured the GNB battery recycling facility in Columbus, Georgia to obtain information on state of the art desulfurization and SO₂ scrubbing.

Oct. 17, 1996 The GNB plant in Columbus, Georgia provided their SO₂ scrubber cost data to DEP.

Dec. 2, 1996 GCR executed a waiver of the permit processing clock until June 3, 1997.

Dec. 3, 1996 DEP confirmed by letter an agreement reached by teleconference with GCR whereby GCR will research available options for advanced desulfurization and submit a report to DEP by January 2, 1997.

Dec. 27, 1996 GCR submitted its research report on desulfurization concluding that repulping and refiltering of the desulfurization paste would improve sulfur removal only 1/2 to 1.0%.

Jan. 6, 1997 DEP sent GCR an analysis of the report concluding that instead of 1/2 to 1.0%, the improvement in sulfur removal from repulping and refiltering would be about 22%.

Jan. 10, 1997 EPCHC submitted comments on DEP's Jan. 6 letter agreeing that the improvement would be over 20% and stating that repulping/refiltering may be cost effective.

Feb. 3, 1997 DEP received letter from M.A. Industries (GCR's desulfurization contractor) stating that they have not had any experience with advanced desulfurization (such as that installed at the Columbus, GA facility).

Mar. 28, 1997 DEP received letter from Lake Engineering confirming that the new GNB facility in Columbus has already demonstrated 89% sulfur removal. GNB's plans call for reaching 98% removal through further refinements.

History of blast and slag furnace exhaust emission limits:

Permit No.	AO29-12482	AO29-78246	?	AO29-173310
	1981	1984	1984	1990
Input (tons/yr)	4.67	4.67	4.58	4.58
PM (lb/yr)	2.50	2.5	2.50	2.15
PM (tons/yr)	9.75	9.75	9.75	8.38
Pb (lb/yr)	1.81	1.81	1.81	1.81
Pb (tons/yr)	7.01	7.01	7.01	7.06
SO ₂ (lb/yr)	-			384.2
SO ₂ (tons/yr)	-			1498.3

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

4. PROCESS DESCRIPTION

4.1 General Information

The GCR facility produces lead ingots by using a blast furnace to melt scrap lead recovered from spent automotive and industrial batteries. The first step in the process involves sawing the batteries and collecting the battery acid in a holding tank. The lead cells in the batteries are removed from their plastic casings mechanically and then processed in a hammermill for size reduction. A flotation process separates plastic and rubber-bearing components from the lead reduced in the hammermill. The sludges from the flotation step and the acid settling tank are sent along with the lead cells to the blast furnace where the lead is melted. The blast furnace charge consists of lead, coke, lime rock, cast iron and returned slag. Molten lead and slag are tapped off separately from the blast furnace. The lead is further refined and combined with alloying metals in refining kettles

5. RULE APPLICABILITY

The proposed project is subject to preconstruction review requirements under the provisions of Chapter 403, Florida Statutes, and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.).

This facility is located in Hillsborough, an area designated as attainment for all criteria pollutants in accordance with Rule 62-204.360, F.A.C. The proposed project is subject to review under Rule 62-212.400., F.A.C., Prevention of Significant Deterioration (PSD), because the potential emission increases for [pollutant] and [pollutant] exceed the significance emission rates given in Chapter 62-212, Table 62-212.400-2, F.A.C.

This PSD review consists of a determination of Best Available Control Technology (BACT) and unless otherwise exempted, an analysis of the air quality impact of the proposed project's impacts on soils, vegetation and visibility; along with air quality impacts resulting from associated commercial, residential and industrial growth.

[Rule update warning : Please check the latest effective date]

The emission units affected by this permit shall comply with all applicable provisions of the Florida Administrative Code (including applicable portions of the Code of Federal Regulations incorporated therein) and, specifically, the following Chapters and Rules:

Chapter 62-4	Permits.
Rule 62-204.220	Ambient Air Quality Protection
Rule 62-204.240	Ambient Air Quality Standards
Rule 62-204.260	Prevention of Significant Deterioration Increments

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Rule 62-204.360	Designation of Prevention of Significant Deterioration Areas
Rule 62-204.800	Federal Regulations Adopted by Reference
Rule 62-210.300	Permits Required
Rule 62-210.350	Public Notice and Comments
Rule 62-210.370	Reports
Rule 62-210.550	Stack Height Policy
Rule 62-210.650	Circumvention
Rule 62-210.700	Excess Emissions
Rule 62-210.900	Forms and Instructions
Rule 62-212.300	General Preconstruction Review Requirements
Rule 62-212.400	Prevention of Significant Deterioration
Rule 62-296.320	General Pollutant Emission Limiting Standards
Rule 62-297.310	General Test Requirements
Rule 62-297.400	EPA Methods Adopted by Reference
Rule 62-297.401	EPA Test Procedures
Rule 62-297.520	EPA Performance Specifications

6. SOURCE IMPACT ANALYSIS

6.1 Emission Limitations

(i.e.,)

The proposed [facility] [emission unit] will emit the following PSD pollutants (Table 212.400-2): particulate matter, sulfur dioxide, nitrogen oxides, volatile organic compounds, carbon monoxide, sulfuric acid mist, fluorides, beryllium, mercury and lead. The permitted allowable emissions for this [facility] [emission unit] are summarized in Tables 1-1, Air Pollutant Standards and Terms and the compliance procedures are summarized in Table 1-2 Compliance Requirements.

6.2 Emission Summary

[EMISSION UNIT(S) #'s]

Pollutants	Current Allowable		Current Actual		New Allowable		Net Increase	PSD Significant Level
	lb/hr	ton/yr	lb/hr	ton/yr	lb/hr	ton/yr	ton/yr	ton/yr
PM								
PM10								
SO2								
NOx								
CO								
Ozone								

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Sulfuric Acid Mist					
Fluorides					
Total Reduced Sulfur					
Mercury					
Beryllium					
Lead					

Footnotes:

6.3 Control Technology Review

Describe the emission control technologies for each pollutant .refer to BACT determination limits and rationale.

The BACT document is included as a separate document (see Appendix BD)

6.3.1 Nitrogen Oxides (NO_x) [if applicable]

[Explain]

6.3.2 Sulfur Dioxide (SO₂) (etc.) [if applicable]

6.4 Air Quality Analysis [See Cleve Holladay]

6.4.1 Introduction

Description of the air quality analysis for this project.

Cleve please include the AIR TOXIC analysis

7. CONCLUSION

Based on the foregoing technical evaluation of the application and additional information submitted by [Company]., the Department has made a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations provided the Department's Best Available Control Technology Determination is implemented and certain conditions are met. The General and Specific Conditions are listed in the attached draft conditions of approval .

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Permit Engineer:

Meteorologist:

Reviewed and Approved by A. A Linero, P.E.

**TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION**

(GCR tepd)

Gulf Coast Recycling, Inc.
Tampa, Hillsborough County, Florida

Air Permit Number 0570057-001-AC
PSD-FL-215

*Tampa, FL
Hills Co.*

Department of Environmental Protection
New Source Review Section
Bureau of Air Regulation

May 1997

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Gulf Coast Recycling, Inc.
Blast Furnace

Air Permit No. 0570057-001-AC
PSD-FL-215



1. APPLICATION INFORMATION

1.1 Applicant Name and Address

Gulf Coast Recycling, Inc.
1901 North 66th Street
Tampa, Florida 33619

Authorized Representative:
Willis M. Kithchen, President

1.2 Reviewing and Process Schedule

10-11-95: Date of Receipt of Application
12-01-96: Application complete

2. FACILITY INFORMATION

2.1 Facility Location

Gulf Coast Recycling, Inc.
UTM: Zone 17- 364.0 and 3093.6

2.2 Standard Industrial Classification Code

Major Group Number		
Group Number		
Industry Number		

2.3 Facility Category

The secondary metal production industry is on the list of the 28 Major Facility Categories per Chapter 62, Table 62-212.400-1, F.A.C. Since potential emissions from the facility exceed 100 tons per year (TPY) of sulfur dioxide (SO₂), carbon monoxide (CO) and volatile organic compounds (VOCs), this is a major facility according to Rule 62-210.200(171), F.A.C. and is a major Title V Source of Air Pollution per Rule 62-210.200(173).

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Gulf Coast Recycling, Inc.
Blast Furnace

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3. PROJECT DESCRIPTION

3.1 *This project involves the following emissions units:*

EMISSION UNIT NO.	EMISSION UNIT DESCRIPTION

Background Information

The permitting and related history of this project is summarized below:

- June 2, 1983 - GCR requested exemption from RACT PM limits since < 15 TPY.
- Oct. 1983 - EPCHC decided not to require a permit for construction of a new blast furnace but that baseline testing would be required prior to construction to determine if SO₂ emissions would trigger PSD.
- Dec. 1983 - Baseline emission testing conducted for SO₂ from the old blast furnace.
- Jan. 26, 1984 - Renewal permit issued reflecting requirement for baseline SO₂ testing.
- Dec. 4, 1984 - New permit recommended requiring second SO₂ test to determine if PSD-significant increase was triggered by construction of new blast furnace.
- Jan. 28, 1985 - Operating permit AO29-95365 issued.
- July 17, 1990 - Renewal permit issued with SO₂ limit based on 1983 baseline plus 40 TPY.
- Nov. 19, 1990 - Modification of permit ?
- June 19, 1991 - EPA determined that a PSD construction permit should have been required in 1983 and should be issued after-the-fact.
- Oct. 15, 1991 - GCR signed Consent Order with EPCHC requiring filing of PSD application and GCR's compliance plan for blast furnace emissions.
- Nov. 24, 1992 - GCR application for after-the-fact permit forwarded to BAR-Tallahassee by EPCHC for PSD processing. EPCHC notified GCR that application was incomplete.
- Mar. 11, 1993 - DEP staff met with GCR and EPCHC to discuss status of application.
- Apr. 22, 1993 - DEP letter to GCR outlining requirements for filing a complete application.
- May 31, 1994 - GCR submitted PSD application to DEP.
- June 28, 1994 - DEP mailed incompleteness letter.
- April 20, 1995 - DEP mailed followup letter with deadline of May 26, 1995 for submitting the requested information.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Gulf Coast Recycling, Inc.
Blast Furnace

Air Permit No. 0570057-001-AC
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-
- May 11, 1995 - GCR responded to incompleteness letter by requesting additional time to investigate new technologies for lead recovery and desulfurization.
- Aug. 24, 1995 - DEP drafted Intent to Deny Permit for failure to submit information requested.
- Aug. 28, 1995 - GCR notified DEP of its intentions to install desulfurization equipment by October 1996 in advance of DEP's BACT determination.
- Aug. 29, 1995 - GCR submitted a request for an increase in allowable blast furnace charge rate from 4.58 to 6.50 tons per hour without increasing the allowable emission limits which would not be exceeded because they are substantially higher than actual emissions.
- Sep. 8, 1995 - DEP mailed Intent to Deny Permit due to lack of a timely response to request for additional information.
- Sep. 29, 1995 - GCR filed request for extension of time to file petition for administrative hearing.
- Oct. 6, 1995 - GCR contacted the Chief of the Bureau of Air Regulation by phone and obtained agreement not to deny the permit in return for supplying the requested information within 30 days.
- Oct. 11, 1995 - GCR submitted a response to the request for additional information along with a revised application incorporating GCR's proposal to install desulfurization as BACT for SO₂ removal and an afterburner for VOC control.
- Oct. 17, 1995 - GCR provided DEP with written notification of NESHAPS applicability as a major source under Subpart X as required by 40CFR63.9(b), indicating a compliance date of June 23, 1997.
- Oct. 27, 1995 - GCR submitted refined modeling that was required in DEP's June 28, 1994 letter.
- Nov. 21, 1995 - DEP requested additional information regarding the revised application submitted on October 11, 1995 with respect to GCR's proposed new desulfurization and afterburner projects.
- Nov. 27, 1995 - EPCHC submitted comments on GCR's revised application.
- Dec. 4, 1995 - USDOJ submitted comments on GCR's revised application.
- Dec. 11, 1995 - GCR filed third request for extension of time to file petition for hearing.
- Jan. 10, 1996 - GCR submitted responses to DEP's Nov. 21, 1995 request for information and to EPCHC's comments of Nov. 27, 1995.
- Feb. 7, 1996 - EPCHC submitted comments on GCR's Jan. 10 submittal.
- Feb. 8, 1996 - DEP wrote followup letter to GCR pointing out information still incomplete.
- Feb. 9, 1996 - GCR filed fourth request for extension of time to file petition for hearing.
- Mar. 15, 1996 - GCR responded to DEP's Feb. 8 letter by providing additional information.
- Mar. 28, 1996 - Meeting of DEP, EPCHC and GCR representatives was held in Tallahassee.
- Apr. 4, 1996 - EPCHC sent letter to GCR requesting additional information for EPCHC's BACT proposal for SO₂ control.
- May 31, 1996 - GCR responded to EPCHC's Apr. 4 letter and provided BACT cost data.
- Jun. 11, 1996 - DEP wrote followup letter to GCR concerning the March 28 meeting and the fact that the revised application was still incomplete.
- Jun. 24, 1996 - GCR submitted a restatement of its position on the issues as its response to DEP's June 11 letter.
- Jun. 24, 1996 - EPCHC denied GCR's Mar. 25, 1996 soda ash silo construction permit application since the silo is part of the desulfurization project which is tied to DEP's BACT

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Gulf Coast Recycling, Inc.
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- determination for the blast furnace.
- Jul.16,1996-DEP responded to GCR's June 24 restatement of its position by foregoing any further information requests from GCR while attempting to obtain the necessary information from other sources.
- Jul.22,1996-GCR notified DEP by letter that a contract had been entered into for installing desulfurization at a guaranteed sulfur removal rate of 66%. GCR acknowledged that the 66% removal rate will not meet BACT requirements but that 75% removal would and that 75% could be achieved within four years. GCR requested that the PSD permit application be processed under the innovative control technology provisions of Rule 62-212.400(3)(f)4., F.A.C. as a temporary exemption from PSD requirements.
- Jul.25,1996- DEP responded to GCR's July 22 letter explaining that Rule 62-212.400(3)(f)4., providing for a temporary exclusion from increment consumption, could not be applied to desulfurization as an innovative technology since the standard desulfurization process has been adequately demonstrated as a proven technology. DEP also confirmed that 75% removal has not been determined as BACT.
- Aug.15,1996-GCR executed a waiver of the permit processing clock until Dec. 5, 1996.
- Sep.4,1996-EPCHC negotiated a consent order with GCR allowing installation of desulfurization and the afterburner project while addressing recent emission violations.
- Sep.5,1996-DEP permit engineer toured the GNB battery recycling facility in Columbus, Georgia to obtain information on state of the art desulfurization and SO₂ scrubbing.
- Oct.17,1996-The GNB plant in Columbus, Georgia provided their SO₂ scrubber cost data to DEP.
- Dec.2,1996-GCR executed a waiver of the permit processing clock until June 3, 1997.
- Dec.3,1996-DEP confirmed by letter an agreement reached by teleconference with GCR whereby GCR will research available options for advanced desulfurization and submit a report to DEP by January 2, 1997.
- Dec.27,1996-GCR submitted its research report on desulfurization concluding that repulping and refiltering of the desulfurization paste would improve sulfur removal only 1/2 to 1.0%.
- Jan.6,1997-DEP sent GCR an analysis of the report concluding that instead of 1/2 to 1.0%, the improvement in sulfur removal from repulping and refiltering would be about 22%.
- Jan.10,1997-EPCHC submitted comments on DEP's Jan. 6 letter agreeing that the improvement would be over 20% and stating that repulping/refiltering may be cost effective.
- Feb.3,1997-DEP received letter from M.A. Industries (GCR's desulfurization contractor) stating that they have not had any experience with advanced desulfurization (such as that installed at the Columbus, GA facility).
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TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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History of blast and slag furnace exhaust emission limits:

Permit No.	AO29-12482	AO29-78246	?	AO29-173310
	1981	1984	1984	1990
Input (tons/hr)	4.67	4.67	4.58	4.58
PM (lb/hr)	2.50	2.50	2.50	2.15
PM (ton/yr)	9.75	9.75	9.75	8.38
Pb (lb/hr)	1.81	1.81	1.81	1.81
Pb (tons/yr)	7.01	7.01	7.01	7.06
SO2 (lb/hr)	-	-	-	384.2
SO2 (tons/yr)				1,498.3

4. FACILITY DESCRIPTION

4.1 General

4.2 Process Description *leaf*

(on green)

4.2.1 Emission Unit ID 079 - Diatomaceous Earth Unloading

Diatomaceous earth (DE) is pneumatically unloaded from trucks or railcars and conveyed to a storage silo. The silo is fitted with an efficient baghouse to control PM emissions from the transfer operation. The maximum DE unloading rate is currently 12 TPH. The DE is then transferred to a weigh bin before it is pneumatically transferred to the acid defluorination tanks. With the proposed plant expansion, the DE unloading operation will remain the same (12 TPH, maximum), but maximum operating hours will increase to 8,760 hr/yr. DE will be pneumatically conveyed to the acid batch tanks in both the existing and the new animal feed plants.

4.2.2 Emission Unit ID 103 - Acid Defluorination

DE is metered from the weigh bin to the acid batch tanks where it is slurried with PFS and defluorinated in a batch stripping process. The existing AFI Plant No. 1 has two batch tanks. The

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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proposed plant will add two additional batch tanks. At the conclusion of the batch operation, defluorinated PFS is pumped to the storage tanks.

Fluoride emissions from the acid batch tanks are controlled by wet scrubbers. The two existing AFI Plant No. 1 batch tanks are controlled by a single wet scrubber. The two new AFI Plant No. 2 batch tanks will be controlled by a separate wet scrubber, equivalent in design to the existing AFI Plant No. 1 wet scrubber.

4.2.3 Emission Unit ID 080 - Granulation Process

The defluorinated PFS is reacted with limestone to produce calcium phosphate. Ground limestone is pneumatically unloaded from trucks into a bulk storage silo adjacent to the granulation plant area for AFI Plant No. 1. The maximum limestone unloading rate is 25 TPH. A baghouse controls PM emissions from the transfer operation. Limestone is periodically transferred from the storage silo by pneumatic conveyor to the limestone day bin in the granulation plant building. PM emissions from the day bin are controlled by a baghouse. The baghouse is vented back inside the.

The limestone is metered from the limestone day bin into a hopper and then into a high speed mixer where it reacts with heated defluorinated PFS to form a mixture of MCP or DCP. The proportions of limestone and hot acid are adjusted to determine the grade of AFP. The acid and limestone slurry is combined in the mixer. A stream of dust and crushed oversize material from the recycle system are added to the acid/limestone slurry in the pug mill, which produces a granular material. The material then discharges into the rotary dryer.

The damp calcium phosphate solids discharge from the pug mill directly into the rotary dryer. Heated air is supplied from a separate combustion chamber which is normally fueled by natural gas. Provisions are made to use No. 2 fuel oil as a stand-by fuel for less than 400 hours per year. Dry solids discharge from the end of the dryer, through a grizzly, into the dryer elevator. The dryer exhaust gases pass through cyclones to capture product, and then through a venturi scrubber for PM control.

The AFI Plant No. 2 will utilize the existing limestone unloading system and storage silo. This system will be common to both plants. The AFI Plant No.2 granulation area will be equivalent in design to the AFI Plant No. 1 granulation area. The maximum production rate of the AFI Plant No. 2 dryer will be the same as the AFI Plant No. 1 dryer: 150,000 TPY of AFP, which equates to 24.17 TPH based on a 17-hour day, 365 days per year. The proposed future production rate of both AFI No. 1 and No. 2 plants combined will be 300,000 TPY, or 48.35 TPH based on a 17-hour day.

4.2.4 Emission Unit ID 103 - Solids Handling

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The solids handling section of the AFI Plant No. 1 granulation plant takes the solids discharged from the dryer and classifies, cools and de-dusts the materials. The dryer elevator discharges material onto a double-deck screen which separates the material into oversize, product and fine streams. Provisions are made to bypass excess recycle material around the screen directly to the roller mill, which also receives the oversize material from the screen.

Product size material from the screen discharges to a fluid bed classifier/cooler. This unit has a dual function; positive removal of dust and fines from the product stream by entrainment into the fluidizing air; and cooling of the product material to minimize storage and shipping problems. Cooled, onsize material is discharged from the fluid bed unit into the product storage silos. Particulate emissions from the mills and classifier/cooler are vented to the equipment vents cyclones and then to the dryer venturi scrubber.

The AFI Plant No. 2 will utilize an identical system for solids handling, consisting of a fluid bed cooler/classifier and roller mills. AFP will be sent to the existing product silos which also serve AFI Plant No. 1. Particulate emissions from the AFI Plant No. 2 mills and classifier/cooler will be vented to the equipment vent cyclones and then to the dryer venturi scrubber within the plant. The exhaust from the scrubber exits through the AFI Plant No. 2 common stack.

4.2.5 Emission Unit ID 081- Product Loadout

The existing product loadout system will serve both AFI No. 1 and No. 2 plants. Withdrawal of product from the product silos is metered to the loadout elevator and then to the loadout surge bin, loadout weigh building bin, and finally to trucks or railcars. The maximum loading rate through the loadout system is 100 TPH. The silos and load-out systems are equipped with ventilation systems and a baghouse to control PM emissions. An 80-ton tank is used to store off-specification material for recycle. PM emissions from the tank are vented to the equipment vent cyclones.

The process flow diagram for this facility is presented in Figure 2-1.

5. RULE APPLICABILITY

The proposed project is subject to preconstruction review under the applicable provisions of Chapter 403, Florida Statutes, and Chapters 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). This facility is located in Hillsborough County, an area designated as air quality maintenance area for PM. The proposed project is subject to review under Rule 62-212.400., F.A.C., Prevention of Significant Deterioration (PSD), because the emission increases for PM/PM₁₀, F and NO_x exceed the significance emission rates given in Chapter 62, Table 62-212.400-2. This review consists of a determination of Best Available Control Technology (BACT) and unless otherwise exempted, an analysis of the air quality impact of the proposed project's impacts on soils, vegetation and visibility; along with air quality impacts resulting from associated commercial, residential and industrial growth. The emission units affected by this modification shall comply with all applicable provisions of the Florida

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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Administrative Code (including applicable portions of the Code of Federal Regulations) and, specifically, the following chapters and rules:

- Chapter 62-4 Permits.
- Rule 62-204.220 Ambient Air Quality Protection
- Rule 62-204.240 Ambient Air Quality Standards
- Rule 62-204.260 Prevention of Significant Deterioration Increments
- Rule 62-204.360 Designation of Prevention of Significant Deterioration Areas
- Rule 62-204.800 Federal Regulations Adopted by Reference
- Rule 62-210.300 Permits Required
- Rule 62-210.350 Public Notice and Comments
- Rule 62-210.370 Reports
- Rule 62-210.550 Stack Height Policy
- Rule 62-210.650 Circumvention
- Rule 62-210.700 Excess Emissions
- Rule 62-210.900 Forms and Instructions
- Rule 62-212.300 General Preconstruction Review Requirements
- Rule 62-212.400 Prevention of Significant Deterioration
- Rule 62-212.500 Preconstruction Review for Nonattainment Areas
- Rule 62-296.320 General Pollutant Emission Limiting Standards
- Rule 62-296.330 Best Available Control Technology (BACT)
- Rule 62-296.403 Phosphate Processing
- Rule 62-296.700 Reasonable Available Control Technology (RACT) Particulate Matter
- Rule 62-296.705 Phosphate Processing Operations
- Rule 62-296.711 Materials Handling, Sizing, Screening, Crushing and Grinding Operations
- Rule 62-297.310 General Test Requirements
- Rule 62-297.400 EPA Methods Adopted by Reference
- Rule 62-297-401 EPA Test Procedures
- Rule 62-297.520 EPA Performance Specifications

The Animal Feed Ingredient plant is not subject to the NSPS requirements.

These emission units shall comply with all applicable requirements of 40 CFR 60, General Provisions, Subpart A.

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6. SOURCE IMPACT ANALYSIS

6.1 Emission Summary

ANIMAL FEED INGREDIENT PLANT No. 1

Source / Emission Unit ID	Pollutants	Current Allowable		New Allowable	
		lb/hr	ton/yr	lb/hr	ton/yr
Common Stack / 078	PM/PM ₁₀	2.82	11.69	6.00	26.28
	F	0.53	1.6	0.53(a)	1.63
DE Silo / 079	PM/PM ₁₀	0wazzu .089	0.011	0.089	0.39
Limestone Silo / 080	PM/PM ₁₀	0.12	0.21	0.12	0.52
AFP Loadout System / 081	PM/PM ₁₀	2.96	2.96	2.22	3.89

ANIMAL FEED INGREDIENT PLANT No. 2

Source / Emission Unit ID	Pollutants	New Allowable	
		lb/yr	ton/yr
Common Stack / 103	PM/PM ₁₀	6.00	26.28
	F	0.53 (a)	1.63

COMBINED AFI PLANTS No. 1 & No. 2

Source	Pollutants	Allowable Emissions		Net Increase ton/yr	PSD Significant Level ton/yr
		lb/hr	ton/yr		
Plant	PM/PM ₁₀	14.43	57.36	57.36	25/15
	F	1.05	3.26	3.26	3

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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Total Emissions from Fuel Combustion

Pollutants	No.2 Fuel Oil		Natural Gas	
	lb/hr	ton/yr	lb/hr	ton/yr
SO ₂	47.01	9.40	0.056	0.24
NO _x	13.24	2.65	12.98	56.84
CO	3.31	0.66	3.24	14.21
VOC	0.132	0.026	0.26	1.14

Footnote:

(a) - Based on 223.6 tons P₂O₅ per batch run; 1 batch per day and 17 hours per batch, operating 365 days per year.

6.2 Emission Limitations

This facility emits the following PSD regulated pollutants: particulate matter, nitrogen oxides and fluorides. This facility was originally permitted under air construction permit AC29-242897, issued June 16, 1994. This permit was amended on January 12, 1996, with the issuance of air construction permit 0570008-002-AC. The purpose of the amendment was to update the design data for the plant.

This new PSD review, PSD-FL-234, will cover the increases in the production rate of the AFI plant and revise the current PM emission limit. The permitted emissions and compliance requirements for this facility are summarized in Tables 1-1, Air Pollutant Emission Standards and Terms, and Table 2-1, Compliance Requirements

6.3. AIR QUALITY ANALYSIS

6.3.1 Introduction

The proposed project will emit three pollutants at levels in excess of PSD significant amounts: NO_x, PM/PM₁₀, and F. The air quality impact analyses required by the PSD regulations for these pollutants include:

- * An analysis of existing air quality for PM₁₀, NO₂ and F;
- * A significant impact analysis for PM₁₀ and NO₂;
- * A PSD increment analysis for PM₁₀ and NO₂
- * An Ambient Air Quality Standards (AAQS) analysis for PM₁₀ and NO₂; and
- * An analysis of impacts on soils, vegetation, and visibility and of growth-related air quality modeling impacts.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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The analysis of existing air quality generally relies on preconstruction monitoring data collected with EPA-approved methods. The significant impact, PSD increment and AAQS analyses depend on air quality dispersion modeling carried out in accordance with EPA guidelines.

Based on the required analyses, the Department has reasonable assurance that the proposed project, as described in this report and subject to the conditions of approval proposed herein, will not cause or contribute to a violation of any AAQS or PSD increment. However, the following EPA-directed stack height language is included: "In approving this permit, the Department has determined that the application complies with the applicable provisions of the stack height regulations as revised by EPA on July 8, 1985 (50 FR 27892). Portions of the regulations have been remanded by a panel of the U.S. Court of Appeals for the D.C. Circuit in *NRDC v. Thomas*, 838 F. 2d 1224 (D.C. Cir. 1988). Consequently, this permit may be subject to modification if and when EPA revises the regulation in response to the court decision. This may result in revised emission limitations or may affect other actions taken by the source owners or operators." A discussion of the required analyses follows.

6.3.2 Analysis Of Existing Air Quality And Determination Of Background Concentrations

Preconstruction ambient air quality monitoring is required for all pollutants subject to PSD review unless otherwise exempted or satisfied. This monitoring requirement may be satisfied by using previously existing representative monitoring data, if available. An exemption to the monitoring requirement may be obtained if the maximum air quality impact resulting from the projected emissions increase, as determined by air quality modeling, is less than a pollutant-specific de minimus concentration. In addition, if an acceptable monitoring method for the specific pollutant has not been established by EPA, monitoring may not be required.

If preconstruction ambient monitoring is exempted, determination of background concentrations for PSD significant pollutants with established AAQS may still be necessary for use in any required AAQS analysis. These concentrations may be established from the required preconstruction ambient air quality monitoring analysis or from previously existing representative monitoring data. These background ambient air quality concentrations are added to pollutant impacts predicted by modeling and represent the air quality impacts of sources not included in the modeling.

The table below shows that PM_{10} and F impacts from the project are predicted to be greater than the de minimus levels; therefore, preconstruction ambient air quality monitoring is required for PM_{10} and F. The department is not requiring preconstruction monitoring for F for this project because there are no EPA-approved monitoring methods for F. The maximum impact of the project's F emissions were modeled, however, and compared to the department's draft ambient reference concentrations for F; the modeling results are presented in the F impacts section. Additionally, a BACT determination which will set maximum emission limits for F emissions is required for this project. Previously existing representative monitoring data from a PM_{10} monitor in the vicinity of the facility (Gardinier Park) are used to fulfill the PM_{10} monitoring requirement and to establish a PM_{10} background concentration for use in the AAQS analysis. The table below shows that NO_2 impacts from the project are predicted to be less than the de minimus level. Therefore, preconstruction ambient air quality monitoring is not required for this pollutant. However, since an AAQS analysis is required for NO_2 (the project's impacts alone for this pollutant is greater than significant, as will be discussed later in this section), previously existing representative monitoring data from an NO_2 monitor located in the vicinity of the project (Gandy Boulevard) is used to establish a background concentration. Background concentrations for PM_{10} and NO_2 are 20 ug/m³ and 21 ug/m³, respectively.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Gulf Coast Recycling, Inc.
Blast Furnace

Air Permit No. 0570057-001-AC
PSD-FL-215

Maximum Project Air Quality Impacts for Comparison to the De Minimus Ambient Levels.

Pollutant	Avg. Time	Max Predicted Impact ¹ (ug/m ³)	Impact Greater Than De Minimus?	De Minimus Level (ug/m ³)
PM ₁₀	24-hour	14.4	YES	10
F	24-hour	0.83	YES	0.25
NO ₂	Annual	1.4	NO	14

6.3.3 Models And Meteorological Data Used In Significant Impact, PSD And AAQS Analyses

The EPA-approved Industrial Source Complex Short-Term (ISCST3) dispersion model was used to evaluate the pollutant emissions from the proposed project and other existing major facilities. The model determines ground-level concentrations of inert gases or small particles emitted into the atmosphere by point, area and volume sources. The model incorporates elements for plume rise, transport by the mean wind, Gaussian dispersion, and pollutant removal mechanisms such as deposition. The ISCST3 model allows for the separation of sources, building wake downwash, and various other input and output features. A series of specific model features, recommended by the EPA, are referred to as the regulatory options. The applicant used the EPA recommended regulatory options in each modeling scenario. Direction-specific downwash parameters were used for all sources for which downwash was considered.

Meteorological data used in the ISCST3 model consisted of a concurrent 5-year period of hourly surface weather observations and twice-daily upper air soundings from the National Weather Service (NWS) stations at Tampa International Airport, Florida (surface data) and Ruskin, Florida (upper air data). The 5-year period of meteorological data was from 1987 through 1991. These NWS stations were selected for use in the study because they are the closest primary weather stations to the study area and are most representative of the project site. The surface observations included wind direction, wind speed, temperature, cloud cover and cloud ceiling.

Since five years of data were used in ISCST3, the highest-second- high (HSH) short-term predicted concentrations were compared with the appropriate AAQS or PSD increments. For the annual averages, the highest predicted yearly average was compared with the standards. For determining the project's significant impact area in the vicinity of the facility and if there are significant impacts from the project on any PSD Class I area, both the highest short-term predicted concentrations and the highest predicted yearly averages were compared to their respective significant impact levels.

6.3.4 Significant Impact Analysis

Initially, the applicant conducted modeling using only the proposed project's emissions. Receptors were placed within 5 km of the facility, which is located in a PSD Class II area, and the Chassahowitzka National Wilderness Area (CNWA) which is a PSD Class I area located approximately 86 km to the north-northwest of the project at its closest point. For each pollutant subject to PSD and also subject to PSD increment and/or AAQS analyses, this modeling compared maximum predicted impacts due to the project with PSD significant impact levels to determine whether significant impacts due to the project were predicted in the vicinity of the facility or in the CNWA. The tables below show the results of this

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Gulf Coast Recycling, Inc.
Blast Furnace

Air Permit No. 0570057-001-AC
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modeling. The radius of significant impact, if any, for each pollutant and applicable pollutant averaging time is also shown in the tables below.

Maximum Project Air Quality Impacts for Comparison to the PSD Class II Significant Impact Levels in the Vicinity of the Facility.

Pollutant	Avg. Time	Max Predicted Impact (ug/m ³)	Significant Impact Level (ug/m ³)	Significant Impact?	Radius of Significant Impact (km)
PM ₁₀	Annual	2.2	1	YES	3
	24-hour	14.4	5	YES	3
NO ₂	Annual	1.35	1	YES	1.5

Maximum Project Air Quality Impacts for Comparison to the PSD Class I Significant Impact Levels (CNWA)

Pollutant	Averaging Time	Max. Predicted Impact at Class I Area(s) (ug/m ³)	Significant Impact?	National Park Service (NPS) Significant Impact Level (ug/m ³)
PM ₁₀	Annual	0.004	NO	0.08
	24-hour	0.09	NO	0.27
NO ₂	Annual	0.003	NO	0.025

As shown in the tables the maximum air quality impacts due to PM₁₀ and NO_x emissions from the proposed project are greater than the significant impact levels in the vicinity of the facility but not in the Class I area. Therefore, the applicant was required to do further PM₁₀ and NO₂ modeling in the vicinity of the facility, within the applicable significant impact area, to determine the impacts of the project along with all other sources in the vicinity of the facility. The significant impact area is based upon the predicted radius of significant impact. No further modeling for Class I impacts was required.

6.3.5 Receptor Network For PSD Class II Increment And AAQS Analyses

For the AAQS and PSD Class II analyses, receptor grids normally are based on the size of the significant impact area for each pollutant. For predicting maximum PM₁₀ concentrations in the vicinity of the facility, a polar receptor grid comprised of 119 discrete and 108 regular grid receptors was used for the screening analysis. The discrete receptors included 36 receptors located on the plant property boundary at 10-degree intervals, plus 83 additional off-property receptors at distances of 0.5, 0.8, 1.1, and 1.5 km from the No. 9 Sulfuric Acid Plant stack, which is the origin of the air modeling coordinate system for this project. The regular polar grid receptors were located at radial distances of 2.0, 2.5 and 3.0 km. For predicting maximum NO_x impacts in the vicinity of the facility, only the 119 discrete polar grid receptors were used in the modeling analysis since the radius of significant impact for NO_x was only 1.5 km.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Gulf Coast Recycling, Inc.
Blast Furnace

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Modeling refinements were done by using a polar receptor grid with a maximum spacing of 100 m along each radial and an angular spacing between radials of 2 degrees.

6.3.6 PSD Class II Increment Analysis

The PSD increment represents the amount that new sources in an area may increase ambient ground level concentrations of a pollutant. The results of the PSD Class II increment analysis are presented in the table below. They show that the maximum predicted impacts are less than the allowable increments.

PSD Class II Increment Analysis

Pollutant	Averaging Time	Max. Predicted Impact ¹ (ug/m ³)	Impact Greater Than Allowable Increment?	Allowable Increment (ug/m ³)
PM ₁₀	Annual	1.0	NO	17
	24-hour	11.6	NO	30
NO ₂	Annual	5.4	NO	25

6.3.7 AAQS Analysis

For pollutants subject to an AAQS review, the total impact on ambient air quality is obtained by adding a "background" concentration to the maximum modeled concentration. This "background" concentration takes into account all sources of a particular pollutant that are not explicitly modeled. The results of the AAQS analysis are summarized in the table below. As shown in this table, emissions from the proposed facility are not expected to cause or contribute to a violation of an AAQS.

Ambient Air Quality Impacts

Pollutant	Averaging Time	Major Sources Impact (ug/m ³)	Background Conc. (ug/m ³)	Total Impact (ug/m ³)	Total Impact Greater Than AAQS	Florida AAQS (ug/m ³)
PM ₁₀	Annual	23	20	43	NO	50
	24-hour	93	20	113	NO	150
NO ₂	Annual	35	21	56	NO	100

6.3.8 Fluoride Impacts Analysis

The maximum predicted impacts of F from the project are shown below. These impacts are less than the draft Florida Ambient Reference Concentrations (ARC).

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Gulf Coast Recycling, Inc.
Blast Furnace

Air Permit No. 0570057-001-AC
PSD-FL-215

Fluoride Impacts

8- hour		24- hour	
Impact (ug/m ³)	ARC (ug/m ³)	Impact (ug/m ³)	ARC (ug/m ³)
1.62	24	0.83	6

6.4. Additional Impacts Analysis

6.4.1. *Impacts On Soils, Vegetation, And Wildlife*

The maximum ground-level concentrations predicted to occur for PM₁₀, and NO_x as a result of the proposed project, including background concentrations and all other nearby sources, will be below the associated AAQS. The AAQS are designed to protect both the public health and welfare. As such, this project is not expected to have a harmful impact on soils and vegetation in the PSD Class II area. An air quality related values (AQRV) analysis was done by the applicant for the Class I area. No significant impacts on this area are expected.

6.4.2. *Impact On Visibility*

Visual Impact Screening and Analysis (VISCREEN), the EPA-approved Level I visibility computer model, was used to estimate the impact of the proposed project's stack emissions on visibility in the CNWA. The results indicate that the maximum visibility impacts do not exceed the screening criteria inside or outside this area. As a result, there is no significant impact on visibility predicted for this Class I area. In addition a regional haze analysis was done. This analysis predicted no adverse impacts upon regional haze.

6.4.3 *Growth-Related Air Quality Impacts*

There will be a small number of temporary construction workers during construction and no significant increase in the number of new permanent workers after project is completed. There will be no significant impacts on air quality caused by associated population growth.

Good Engineering Practice (GEP) stack height means the greater of: (1) 65 m (213 ft) or (2) the maximum nearby building height plus 1.5 times the building height or width, whichever is less. The plant's main stack will be 76.3 m (250 ft), respectively. This stack will not exceed the GEP stack height and will comply with GEP stack height regulations. However, this stack will be less than GEP; therefore, the potential for building downwash to occur was considered in the modeling analysis for this stack.

7. CONCLUSION

Based on the foregoing technical evaluation of the application and additional information submitted by Cargill Fertilizers, Inc., the Department has made a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations provided the Department's Best Available Control Technology Determination is implemented and certain conditions are met. The General and Specific Conditions are listed in the attached draft conditions of approval.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Gulf Coast Recycling, Inc.
Blast Furnace

Air Permit No. 0570057-001-AC
PSD-FL-215

Permit Engineer: S. Arif

May 9, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Stephen Smallwood, P.E.
ERM-South, Inc.
2700 Blair Stone Road - Suite C
Tallahassee, Florida 32314

RE: Blast Furnace Permit (PSD-FL-215)
Gulf Coast Recycling, Inc.

Dear Mr. Smallwood:

This is in response to your May 8 letter concluding that the EPA was incorrect in 1991 when it determined that the 1984 blast furnace replacement is subject to the PSD rules. The Department's position on this issue remains unchanged. The EPA properly made its determination of actual contemporaneous emissions based on a five-year average rather than the usual two-year average since the 1982/1983 increase from 74 to 374 tons SO₂ per year suggested that the 374 was not representative of normal source operation. Also, it must be remembered that the construction permit, had it been submitted, would have been submitted in 1983; i.e. before the 374 was incurred and therefore the 374 figure would not have been the two-year average used. In 1983, past actual emissions vs. future potential emissions would have triggered PSD since future potential emissions were obviously greater than the actual emissions incurred.

However, it may turn out that there is no longer a need for an after-the-fact PSD construction permit since the August 28, 1996 Consent Order accomplishes most of what the permit would have required. Before we received your May 8 letter, we forwarded the enclosed draft letter to Brian Beals at EPA for comment. The EPCHC is in agreement with the approach and if Gulf Coast will agree to an amendment of the Consent Order requiring refiltering/repulping equipment to be installed if the new desulfurization unit does not consistently remove at least 75% of the sulfur, the permitting issue will be resolved. We will let you know of EPA's decision as soon as we receive it.

If you have any questions, please contact John Reynolds or Al Linero at (904)488-1344.

Sincerely,

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

Enclosure

c: B. Beals, EPA Region IV
J. Campbell, EPCHC
B. Thomas, SWD

May 8, 1997

Mr. C.H. Fancy, P.E.
Chief, Bureau of Air Regulation
Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32301
Mail Drop 5500

Re: Gulf Coast Recycling, Tampa, FL
After-the-Fact Air Construction Permit Application
Information Requested

Dear Mr. Fancy:

At our last meeting on the air construction permit application for Gulf Coast Recycling, you asked me to provide you with :

- (1) a clarification of the operation and/or shut down of each of the two 40 ton lead blast furnaces that were in operation before the construction of the new 60ton lead blast furnace; and --
- (2) the annual SO2 emissions for the plant for 1991-1996 as reported on the company's Annual Operating Reports (AORs) that have been submitted to the Department through the Hillsborough County EPC.

40 TON BLAST FURNACES

Prior to the construction and operation of the new 60 ton blast furnace, Gulf Coast Recycling operated two 40 ton lead scrap blast furnaces at their Tampa plant. The two furnaces were vented to the atmosphere by a common stack and permitted and operated as one emissions unit. One of the furnaces was designated as the primary furnace, the other as the backup furnace. Whenever one of the furnaces was in operation, the other furnace was down. They were never operated at the same time.

When the new 60 ton blast furnace went into operation, the emissions unit consisting of the two 40 tons furnaces (primary & backup) were shut down, and have not been operated since then. The SO2 emissions reported to the Department for the plant for calender years 1983 & 1984 represents the typical operation of the two furnace emissions unit during the two year period prior to the startup of the new 60 ton blast furnace. The AOR SO2 data for the years 1985-1996 represents the operation of the new blast furnace during that period, with the old two 40 ton furnaces emissions unit permanently shutdown.

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33426-6556
(561) 736-4648
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1991-96 AOR SO2 DATA

The following table summarizes the annual SO2 emissions for Gulf Coast Recycling's lead battery recycling plant, located in Tampa, Hillsborough County, Florida. The blast furnaces (the former two 40 ton furnace emissions unit & the new 60 ton emissions unit have been the only sources of SO2 emission from the plant.



TABLE 1 - ANNUAL SO2 EMISSIONS - GULF COAST RECYCLING
1983-84 & 1991-96

Calendar Year	Hours of Operation	SO2 Emission Rate (lbs/hr) ¹	SO2 Emission Rate (tons/yr) ²
1983	7272	374	1360
1984	7600	374	1421
1983-84 Ave			1390.5
1983-84 Ave Plus 39.5 TPY ³	Na	Na	1430
1991	7752	261	1014
1992	7756	343	1330
1993	7392	377	1396
1994	7392	334	1249
1995	7704	338	1303
1996	7800	313	1223

Source: Gulf Coast Recycling's AOR Reports to the EPCHC & the FL DEP

1 - Based on EPA Method 6(SO2) Tests - one hour runs per FDEP instructions in 1982.

2 - [SO2 Emission Rate (lbs/hr) x Hours of Operation] / 2000 lbs./ton.

3 - PSD SO2 Significant Net Emission Increase level for the SO2 emissions from the new 60 ton blast furnace, per the Florida PSD rule.

Mr. C.H. Fancy, P.E.
May 8, 1997
Page 3

CONCLUSION

The Florida PSD rule is very clear on how to determine if a significant net emissions increase would occur as of any given date. Agency practice for both FL DEP and U.S. EPA in Florida has been to use the reported AOR data when it is available for the air pollutant of concern. Using the available AOR data and calculating the significant net emissions increase level as prescribed by the rule results in a value of 1430 ton SO₂ per year.



The consent order that required Gulf Coast Recycling to apply for an after-the-Fact air construction permit resolved any violations that might have occurred before that time. Since then the plant's annual SO₂ emissions have been below the 1430 level. The company didn't apply for a construction permit in 1982-83 because the FL DEP and EPCHC air staff told the company that it did not need to. The FL DEP Tampa District Office issued an air operation permit which contained limits on SO₂ emissions and hours of operation that the air staff apparently thought precluded the need for a PSD review. It is not clear to me why they thought an air construction permit was not needed.

In 1982-83, the company should have applied for a construction permit for the new 60 ton blast furnace. That construction permit should have included specific condition that addressed the EPA NSPS limits and any other SIP limits or requirements that applied to the new furnace, and should have, at the company's written request, contained a specific condition that limited the SO₂ emissions from the 60 ton furnace to not more than 1430 tons per year. That is still what needs to be done.

After you have reviewed and considered this information, I would like to meet with you to discuss how we need to proceed to resolve this issue as expeditiously as possible. If there are any other outstanding issues, please identify them for me as soon as possible.

Sincerely,


Stephen Smallwood, P.E.
Project Manager
Air Quality Services

Tallahassee Office
SS/ssm

May 8, 1997

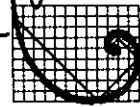
Mr. C.H. Fancy, P.E.
Chief, Bureau of Air Regulation
Division of Air Resources Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32301
Mail Drop 5500

~~① John Reynolds~~
② Kim Tober

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Re: Gulf Coast Recycling, Tampa, FL
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*John - No action
needed. Pursue your
initiative with
EPA/EPCHC.*



ERM

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Mr. C.H. Fancy, P.E.
May 8, 1997
Page 3

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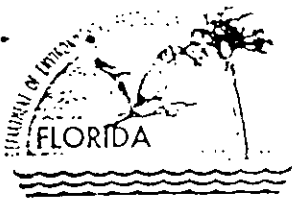
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After you have reviewed and considered this information, I would like to meet with you to discuss how we need to proceed to resolve this issue as expeditiously as possible. If there are any other outstanding issues, please identify them for me as soon as possible.

Sincerely,


Stephen Spallwood, P.E.
Project Manager
Air Quality Services

Tallahassee Office
SS/ssm



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

FAX TRANSMITTAL SHEET

TO: BRIAN BEALS

DATE: 4-30 PHONE: 404-562-8340

TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE: 16

FROM: JOHN REYNOLDS

DIVISION OF AIR RESOURCES MANAGEMENT

COMMENTS: WE WOULD LIKE TO HAVE YOUR COMMENTS ON RESOLVING THE
GULFCOAST RECYCLING PSD PERMIT ISSUE AS PROPOSED IN THE ATTACHED DRAFT
LETTER DATED MAY 6. IF EPA OPPOSES THIS APPROACH, WE WILL ISSUE
THE INTENT AS ORIGINALLY PLANNED. SINCE GULFCOAST HAS AGREED TO
INSTALL ESSENTIALLY THE EQUIPMENT THAT WOULD BE REQUIRED BY
THE PERMIT, WE THOUGHT THE MATTER MIGHT BE BEST RESOLVED
THROUGH AN AMENDMENT TO THE CONSENT ORDER. (COPY OF THE
CONSENT ORDER AND YOUR 6-19-91 LETTER ATTACHED).

PHONE: _____

FAX NUMBER: 904/922-6979

If there are any problems with this fax transmittal, please call
the above phone number.

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

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Department of Environmental Protection

Lawton Chiles
Governor

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2600 Blair Stone Road
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Virginia B. Wetherell
Secretary

May 6, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

DRAFT

Mr. Willis M. Kitchen, President
Gulf Coast Recycling, Inc.
1901 North 66th Street
Tampa, Florida 33619

RE: Blast Furnace Construction Permit PSD-FL-215 (0570057-002-AC)

Dear Mr. Kitchen:

As a result of recent discussions with staff of the Environmental Protection Commission of Hillsborough County (EPCHC), the Department is willing to forego requiring the after-the-fact PSD construction permit for the blast furnace if Gulf Coast Recycling will agree to install the paste repulping and refiltering equipment mentioned in M.A. Industries' letter dated December 4, 1995, in the event that the desulfurization unit does not consistently achieve at least 75% sulfur removal. This can be handled by way of an amendment to the Consent Order that Gulf Coast executed with the Environmental Protection Commission of Hillsborough County on August 28, 1996, and a non-PSD construction permit issued by the EPCHC.

Based on a rough estimate from M.A. Industries, the capital cost of an additional tank, agitator, and pumps along with a filter press would be about \$250,000 contributing toward an incremental annualized cost of about \$20,000. This results in an incremental cost effectiveness of less than \$100 per additional annual ton of sulfur removed, based on an increase from 66% to 77% removal. Since one ton of sulfur generates two tons of SO₂, this is equivalent to \$50 per ton of SO₂ removed which is well below the Department's acceptable cost guidelines for add-on BACT equipment.

By copy of this letter, the Department is requesting that the EPCHC contact you promptly to determine if this matter can be resolved in this way. If there are any questions concerning this letter, please contact John Reynolds or Al Linero at (904)488-1344.

Sincerely,

Howard L. Rhodes, Director
Division of Air Resources Management

HLR/jr

c: J. Campbell, EPCHC
B. Thomas, SWD
B. Beals, EPA Region IV
S. Smallwood, P.E.

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

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|G|N|B|

To: John Reynolds
Florida Department of Environmental Protection

From: Kristen Spangler
(706)685-7955, phone
(706)689-0222, fax
kspangler@gnb.com, e-mail

Date: 4/30/97

Re: Desulfurization repulping/refiltering costs

The following equipment is associated with our repulping system:

Repulp tanks (2)	\$161,655
Repulp agitators (2)	54,372
Repulp pumps (2)	19,585
Cake scrape conveyors (2)	129,289
Repulp filtrate pumps (2)	11,002
Filter presses (2) w/squeeze system	383,875
Repulp Filtrate tank	24,411

Let me know if you need anything else.

Date: 4/26/97 7:04:33 PM
From: Alvaro Linero TAL
Subject: Gulf Recycling and Wheelabrator RRF's
To: John Reynolds TAL
CC: Clair Fancy TAL

John. We met with Steve Smallwood on a number of items on Friday. One of them was GCR. He contends that GCR could net out of PSD Review. He believes that EPA's calculation procedure to prove that PSD applies was erroneously performed.

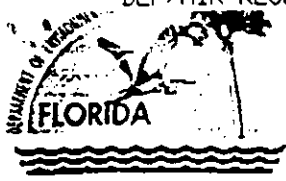
I pointed out that if you took the two years prior to the change (1983/84) and compared it with potential emissions after the change that PSD would indeed apply. EPA's procedure of comparing the six years after the change with the six years before the change (including a zero year) was more for the purpose of proving (after-the-fact) that emissions did actually increase and triggered PSD.

He believes that the correct manner was to compare 1983/84 SO2 emissions with actual SO2 emissions in subsequent years. He may call Brian Beals to discuss it. I told him those guys are reluctant to talk with consultants and prefer to discuss this stuff with us.

We will need to do the netting ourselves at some point on a unit-by-unit basis. We also need to know by how much they would have to reduce SO2 emissions today to stay below 1983/84 values. At some point Clair will have to make a decision whether someone can net out years later and just pay a penalty for the time they exceeded PSD trigger levels. There are some guidances on this I am sure.

No decisions were made and you obviously just need to keep on doing what you are doing. However we all need to understand exactly what happened in terms of all the applicable permitting and enforcement procedures.

On Wheelabrator, he is still stuck on not calling the change a permit modification. I told him that was our call and our job. I gave him a copy of the recent permit modification at Wheelabrator Broward RRF's which were publicly noticed this year. They were to switch to EPA Method 29 for metals.



Department of Environmental Protection

A. Livew

Lawton Chiles
Governor

1997

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

Virginia B. Wetherell
Secretary

FAX TRANSMITTAL SHEET

TO: STEVE SMALLWOOD

DATE: 4-21 PHONE: 656-9752

TOTAL NUMBER OF PAGES, INCLUDING COVER PAGE: 3

FROM: JOHN REYNOLDS

DIVISION OF AIR RESOURCES MANAGEMENT

COMMENTS: Golf Cart Recycling
Air Permit 1

PHONE: _____

FAX NUMBER: 904/922-6979

If there are any problems with this fax transmittal, please call the above phone number.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

Veranda

Hand written notes
by Steve Emulwood
4-25-97

MEMORANDUM

JUN 19 1991

DATE:

SUBJECT: PSD Determination of Gulf Coast Recycling, Inc.

FROM: Brian L. Beals, Chief Source Evaluation Unit *bl*

TO: Mark A. Armentrout, Chief Northern Compliance Unit

6 year average

This determination concerns the operations at Gulf Coast Recycling, Inc. and is in response to your memorandum dated April 26, 1991. Our determinations with respect to PSD are as follows:

- (1) Gulf Coast Recycling is classified as a major stationary source, as defined in CFR 51.166, therefore, when notification was made of impending construction of a new 60 ton blast furnace, the PSD application process should have been initiated. This furnace qualified as a major modification as defined in CFR 51.166, due to the fact that construction would result in a significant net emissions increase and potential to emit increase in pollutants. Based on the emissions sampling data from 1979-90, there was a 43.7% increase in actual SO2 emissions from the pre-construction to post-construction periods. From 1979-84, actual SO2 emissions averaged 208.7 pounds per hour. After completion of the 60 ton blast furnace, actual SO2 emissions from 1985-90 averaged 300.0 pounds per hour. Based on Gulf Coast's annual operating level of 7800 hours per year, the actual emissions increase for SO2 rose from 814 tons per year in 1979-84 to 1170 tons per year in 1985-90. The significant rate of emissions for SO2 is defined as being 40 tons per year or more of that pollutant.

THIS IS NOT how the FL PSD rule suggests "significant net increase"

300 vs. 208.7 = 43.7% inc.

1170 / 814 = 356

208.7 x 7800 / 2000 = 813.9 (2)

208.3 six year average including 1979, as "2000" no APR was formal.

(300 x 7800) / 2000

The preconstruction requirements as outlined in Section 165 of the Clean Air Act should have been met. This would have included obtaining a construction permit for the 60 ton blast furnace prior to its fabrication, instead of obtaining one 6 years after the fact.

- (3) The source is classified as a secondary lead smelter and due to the expected increases in pollutants, PSD review would subject all pollutants in the category to review. This would broaden the scope to include PM, Pb, CO, SO2, NOx, sulfuric acid mist, and hydrogen sulfide.

See notes on the next page
→

→ If the maximum allowable SO₂ emissions for the facility are limited to no more than 1430 Tpy (1390.5 ± 39.5), there is no significant net increase, and no BACT required. In the Application Gulf Coast Recycling requested that their normal operation be limited to 7629 ppy (7629 × 874/200) = 1426.6 Tpy

- (4) Best Available Control Technology (BACT) analysis would be applicable for any pollutants subject to PSD review (from determination (3) above) which exceed their respective significant emissions rate.
- (5) Further investigation is warranted into whether VOC emissions from the 60 ton blast furnace exceeds the 40 tons per year limit for NSR. If NSR is applicable, then LAER and emissions offsets would have to be taken into consideration.
- (6) A final concern with respect to the operations at Gulf Coast pertains to the 50-ton refining kettle built and operated with no construction permit, designated as kettle #3. A valid construction permit should have addressed the operating limitations of kettle #3, specifically with reference to the simultaneous operation of more than two 50-ton kettles. Federally enforceable permit limits should have been incorporated into the construction permit, as they were in the eventual operating permit. According to Gulf Coast, kettle #1 operates independently; kettle #2 (calcium lead formation) is dependent upon the operations of kettle #3 (lead softening). The only impediment to simultaneous operation of all three kettles is manpower constraints, not design features; therefore, it is physically possible for all three 50-ton refining kettles to be operating simultaneously. The potential lead emissions for kettle #3 were 0.874 tons per year - an amount above the significance level of 0.6 tons per year; consequently, a PSD application was required for refining kettle #3.

Should you have any questions, please contact either Dennis Beauregard or Scott Davis at x5014.

Significant Net Increase for PSD is the facility's annual allowable (potential) ^{emissions} minus the facility's "actual" emission (the average of the actual annual emission for the two years prior to a particular date, or another 2 year period that is more representative of the normal operation of the source. In this case, as described in the application, all of the SO₂ emissions data prior to 1983 is known to underestimate the actual emission. "Actual SO₂ emissions for this application is the average of the actual SO₂ emission reported for 1983, 84: 1,390.5 Tpy

From the Gulf Coast Application.

TABLE 4
GULF COAST RECYCLING
ANNUAL OPERATING REPORT SUMMARY

YEAR	HOUR/YR	PRODUCTION TPY	COKE TPY	TSP LBS/HR	TSP TPY	LEAD LBS/HR	LEAD TPY	SO2 LBS/HR	SO2 TPY
1978	6,000	8,750	1,800	2.462	7.386			175	525
1979	No AOR								
1980	5,208	11,636	1,600	1.260	3.30			318	800
1981	6,384	12,500	2,065	1.192	3.80			110	351
1982	6,600	12,380	2,500	0.557	1.84			74	244
1983	7,272	14,995		2.559	9.30	7.51		374	1,360
1984	7,560	15,750	2,395	2.559	9.72	1.7600	6.6900	374	1,421
1985	7,476	No Data	No Data	2.076	7.76	1.1584	4.3300	312	1,168
1986	7,610	16,658	2,690	0.450	1.71	0.0800	0.0304	92	350
1987	7,795	24,079	3,941	0.590	2.30	0.0094	0.0370	353	1,377
1988	7,795	21,489	3,487	1.000	3.90	0.0900	0.3500	377	1,470
1989	7,795	23,350	3,428	0.681	2.65	0.0421	0.1600	339	1,377
1990	7,795	23,494	3,370	0.709	2.77	0.0790	0.0800	326	1,271

208.3

= 1390.5

299.8

hrs lbs/hr tpy
 77,84 6605 250 825.6
 5,90 7711 300 1,156.7

GULF COAST RECYCLING, INC.

After-the-Fact Construction Permit Application

PERMITTING HISTORY

AC-406 - Issued February 2, 1972 for the modification of the dust collection system to include an additional bag collector to serve the lead reclaiming area.

AO-29-399 - Issued May 17, 1972 for operation of dust collector for secondary lead smelting and refining. Expiration date on permit: November 30, 1974.

AO29-2113 - Issued March 27, 1973 for operation of "dust house stack serving lead furnace". Expiration date on permit: July 1, 1975.

AO29-2113 - Reissued October 27, 1975 for the operation of a blast furnace with a baghouse. Expiration date on permit: October 27, 1977.

AO29-12482 - Issued October 20, 1978 for the operation of two blast furnaces with associated hooding, using a baghouse. Expiration date on permit: September 15, 1983. This permit was revised on January 30, 1981 to include the operation of the slagging furnace (See Attachment I).

AC29-18438 - Issued July 6, 1979 for the construction of two baghouses and slagging furnace (This is the flash agglomeration furnace referred to by EPA as a reverberatory furnace). The permit was modified November 1, 1979. Construction was to have taken place between October 31, 1979 and February 28, 1980.

✓ AC29-35694 - Issued January 6, 1981 for construction of a dust collector for the exhaust hoods of the slag and lead tap enclosures of the blast furnace and the slag tap enclosure for the slagging furnace and for a stack for same.

✓ AO29-41831 - Issued August 17, 1981 and modified October 27, 1981, for the operation of the enclosure hoods for the blast and slagging furnaces, all exhausting through a baghouse to a stack. Expiration date on permit: April 20, 1986.

AO29-78246 - Issued January 26, 1984 for the operation of two lead and one slag furnace. Expiration date on permit: January 6, 1989.

AO29-95366 - Issued January 28, 1985 for the operation of all furnace operations. Expiration date on permit: January 9, 1990. This permit and the supporting documentation allowed for the installation of the 60 ton blast furnace provided that there would not be a significant increase in hourly SO₂ emissions over the baseline to be established.

AO29-173310 - Permit issued July 17, 1990, permit amended November 16, 1990, for the operation of all furnace operations. Expiration date on permit: November 16, 1995.

Letter from Hillsborough County Environmental Protection Commission dated April 9, 1991 requiring a construction permit for the blast furnace (See Attachment II).

Consent Order dated October 15, 1991 requiring a after-the-fact construction permit to be submitted in 120 days (See Attachment III).

BASELINE SULFUR DIOXIDE EMISSION RATE

The baseline SO₂ emission rate for the 40 ton blast furnace was established during 1983 with full knowledge and consent of both the Florida Department of Environmental Regulation and the Environmental Protection Commission of Hillsborough County.

In a meeting held on September 21, 1983, representatives from Gulf Coast Lead met with the FDER's air permitting staff and the EPC's air permitting staff to discuss the proposed installation of a 60 ton design capacity blast furnace to be built in order to reduce worker exposure levels for OSHA purposes. (See the Memorandum dated September 21, 1983 and November 4, 1983 from Joyce D. Morales-Caramella of Gulf Coast Lead to the file enclosed as Attachment IV).

FDER had concerns over the actual emission levels from the 40 ton blast furnace. The latest available test showed an emission rate of 74 pounds of SO₂ per hour. The previous application submitted on the 40 ton blast furnace estimated the SO₂ emissions to be 99 pounds per hour. FDER assumed that the increase in production capacity may have result in a significant increase in SO₂ emission rates which might trigger PSD permitting. No action was taken as a result of this meeting. Gulf Coast Recycling requested time to review the testing history of the SO₂ emissions and would request another meeting with FDER and EPC to discuss the SO₂ emissions and the proposed 60 ton furnace.

A meeting was held on November 4, 1983 at FDER with their air permitting staff and two representatives from Gulf Coast Recycling (See Attachment IV and V). At the meeting Gulf Coast Recycling reviewed the stack testing history for SO₂ which is summarized in Table 1. The emissions per twenty (20) minute run ranged from 35 lbs per hour to 380 lbs per hour. This significant variability on the SO₂ emission rates per run

concerned both Gulf Coast Recycling and FDER. Gulf Coast Recycling explained to FDER that the likely cause of the noted variability was due to the cyclic nature of the blast furnace operation. Gulf Coast Recycling went on to explain that once every hour the slag was tapped and during this time the smelting process is halted. The standard EPA Method 6 test for sulfur dioxide requires a twenty (20) minute run. Since the process takes approximately one (1) hour to complete it was felt that one (1) hour runs was more appropriate in determining the SO₂ emissions than the previously conducted twenty (20) minute runs. FDER further concluded that the twenty (20) minute SO₂ runs were not representative of the process and therefore the previously conducted test should not be the basis for determining the SO₂ baseline emission. Gulf Coast Recycling proposed to conduct 10-12 one hour runs to determine the baseline emissions from the existing 40 tons blast furnace. FDER agreed at that time that the results would be used to determine Gulf Coast Recycling's SO₂ emission cap.

In a letter dated December 5, 1983 to Mr. Jerry Campbell of the Environmental Protection Commission of Hillsborough County, the dates for this baseline testing were established to be December 7, 8, and 9, 1983. This letter went on to explain that the twenty (20) minute test runs previously conducted were not representative due to the cyclic nature of the blast furnace and that the blast furnace was charged at least 5 times each hour and the slag was tapped once each hour. While the slag was being tapped, the smelting process essentially comes to a halt. In order to determine the sulfur dioxide emissions during the entire cycle the emission test will be conducted for one hour each. Gulf Coast Lead requested a representative from EPC and FDER come out to witness the test and that these test results would be used as a basis for the sulfur dioxide emission cap (A copy of this letter

is included as Attachment VI).

On December 5, 1983 Mr. Jerry Campbell of the Environmental Protection Commission of Hillsborough County inspected the blast furnace in regard to the current renewal application in-house (See Attachment VII).

On December 7, 1983, Jerry Campbell of Environmental Protection Commission provided FDER with the County's permitting recommendations on the blast furnace renewal application (See Attachment VIII).

On December 7, 8, and 9, 1983 Environmental Engineering Consultants, Inc. conducted a series of sulfur dioxide tests for Gulf Coast Lead. The purpose of the test was to establish the average sulfur dioxide emission rate from the 40 ton blast furnace. A complete copy of the test report is included as Attachment IX. The following is a summary of the test results:

✓ - not typical of SO₂ emission

One-Hour Run Number	Sulfur Dioxide Pounds Per Hour
1	114 ✓
2	375
3	518
4	33 ✓
5	399
6	330
7	398
8	466
9	490
10	618
Average	374 <i>49.25</i>

should have been this

On January 13, 1984 in an FDER internal memorandum from Jim Estler through Bill Thomas, P.E. and Dan Williams, P.E. to the file, the staff recommendation on a draft operating permit for the two existing lead furnaces was submitted for approval. This approved memo stated the baseline SO2 emission rate was to be determined by stack testing the existing lead furnace for 9 runs. Each test period is to be representative of the batch/smelt cycle. Reference was also made to the replacement of the 40 ton furnace with the 60 ton furnace. Gulf Coast Recycling was to provide FDER with the information on the proposed furnace replacement and provide an explanation that there would not be an increase in emissions. Once this was received, the proposed operating permit would be amended to reflect the change (Copy of this memo is enclosed as Attachment X).

On January 26, 1984 FDER issued an operating permit AO29-78246 to Gulf Coast Lead for the operation of the two lead blast furnaces and one slag furnace (Copy of Permit is enclosed at Attachment XI). Specific Condition No. 5 of said permit required Gulf Coast Lead to conduct SO2 emission testing by methods approved by both EPCHC and FDER to establish the actual emission of the source. The test was to be conducted within sixty (60) days of receipt of permit and clearly stated that at the time that the report was received, EPCHC and FDER would set the SO2 emission standards which would become part of the permit. This condition read as follows:

"5. Within 60 days of receipt of this operating permit, the applicant will have conducted SO2 emission testing by methods approved by the Hillsborough County Environmental Protection Commission (HCEPC) and the Florida Department of Environmental Regulation (FDER) to establish the actual emissions from this source. The results of these test shall be reported to the regulatory agencies listed above in this same period. At that time the HCEPC and FDER will set an SO2 emission standard which shall become a part of this permit."

In a letter from Gulf Coast Lead to Jim Estler of FDER on February 20, 1984, Gulf Coast Lead notified FDER that they were planning on rebuilding the older of the two blast furnaces. The letter stated that once the new blast furnace was completed it would be placed into operation and the old furnace would be partially dismantled and used only as a reserve. The letter stated that the two remaining blast furnaces would never be operated simultaneously. The new furnace would have a greater capacity but would be operated fewer days per year. This letter stated that the following pollution control features for the new furnace and its operation were to be as follows:

- (1) Groups will be aged in the storage pile prior to being fed into the blast furnace thus decreasing the amount of sulfates fed to the furnace.
- (2) The air velocity in the furnace will be lower, reducing the particulate loading going into the baghouses.
- (3) The new furnace will have an oval configuration rather than the present round configuration. Charges will then not tend to build up unevenly in the furnace thus eliminating hot spots which reduce efficiency and increase emissions.
- (4) Due to the configuration of the new furnace, charges will also have a longer residence time allowing greater quantities of sulfates to become fixed in the slag.

Because of the aforementioned features and operation modifications and others, it is estimated that operation of the new blast furnace will not result in increased sulfur dioxide emissions and any increase in particulate emissions will be negligible.

Enclosed with this letter was a copy of the stack test report on the 10 test runs conducted on December 7, 8, and 9, 1983 for SO₂. A copy of this letter is enclosed as Attachment XII.

In a Hillsborough County Environmental Protection Commission's conversation

record dated March 4, 1984, representatives from Gulf Coast Recycling and FDER met with Jerry Campbell and agreed that the December 7 - 9, 1983 test results for SO2 on the existing blast furnace would be used to establish the baseline at 374 pounds of SO2 per hour. Gulf Coast Lead stated that they now intend to use the 40 ton blast furnace as a backup to the 60 ton furnace. The new 60 ton furnace will be tested within a reasonable period after it comes on line. It was clearly stated that if the SO2 emissions were greater than 374 pounds per hour and the significant levels for SO2 in Table 500-2 were triggered, then Gulf Coast Lead would be subject to PSD for SO2. The current backup furnace for the 40 ton unit would be retired and only two furnaces would remain on site. A copy of this conversation records is enclosed as Attachment XIII.

→ 60 ton slag Furnace

In a meeting held on November 1, 1984, representatives from Gulf Coast Lead discussed with Jerry Campbell EPCHC some issues regarding the blast furnaces and its permitting requirements. Mr. Campbell's records indicated that the blast furnace would be subject to NSPS's particulate and opacity regulations (See Attachment XIV).

In a November 7, 1984 memorandum to file from Joyce D. Morales further details of the November 1, 1984 meeting were discussed (See Attachment XV). Paragraph 2 states that Jerry Campbell had spoken to the Brian Beals of EPA and was told that the blast furnace would be considered a new source and while in the meeting Mr. Campbell called FDER and confirmed that the blast furnace was indeed a new source. In Paragraph 3 Mr. Campbell states that this new source would not trigger new source review or PSD requirements.

In a letter from Gulf Coast Recycling to Mr. Jerry Campbell of EPCHC dated November 6, 1984 the highlights of the November 1st meeting was confirmed See

Attachment XVI. The blast furnace would be considered a new source and subject to NSPS but the facility would not be subject to new source review. This letter stating that the blast furnace SO₂ emission cap was 374 pounds per hour and 1459 tons per year.

In an inspection memo dated November 1984 Jerry Campbell of EPCHC inspected the furnace and established that the 40 ton furnace was still operating and the new 60 ton furnace was still not operating (See Attachment 17).

On December 4, 1984 the EPCHC made recommendations to FDER for issuance of an operating permit for the blast furnace and its associated operation (See Attachment XVIII). In recommended Condition No. 5, under the heading covering blast furnace operation, EPC stated that:

"If the sulfur oxides compliance test for January, 1985, indicates that SO₂ emission have increased significantly over the 374 pounds per hour baseline established in 12/83, then the permittee shall reapply under the provision of FAC 17-2.500. A significant increase here shall be defined as 10.2 pounds per hour over the baseline of 374. That works out to 40 tons per year over 7800 hours."

On January 28, 1985 FDER issued a comprehensive permit (AO29-95366) for the blast furnace operation (See Attachment XIX). The project description on Page 1 allowed for the operation of two secondary lead blast furnaces and 1 flue dust agglomeration furnace. The 60 ton capacity furnace installed in 1984 was designated as the primary furnace and the 40 ton capacity furnace was designated as the backup furnace. Under Specific Condition No. 1E, the sulfur oxide emissions were limited as follows:

"If the sulfur oxides compliance test for January, 1985 indicates that SO₂ emissions have increased significantly over the 374 pounds per hour baseline established in 12/83, then the permittee shall reapply under the provisions of F.A.C. 17-2.500. A significant increase here shall be defined as 10.2 pound per hour over the baseline of 374. That works out to 40 tons per year over 7800 hours."

On July 17, 1990 FDER issued permit no. AO29-173310 which covered the operation of the blast furnace and the agglomeration furnace (See Attachment XX). Specific Condition No. 8 again address the SO2 emissions and stated:

"8. Sulfur dioxide (SO2) emissions shall not exceed 384.2 pounds per hour. If testing indicates that SO2 emissions exceed 384.2 (374 lbs/hr base line + 40 tons/yr., 12/83) then the permittee shall immediately reapply for a new permit under the provisions of Section 17-2500, F.A.C."

Condition No. 10 established the method for sulfur oxide testing to be the same as the methods used in the December 1983 test.

On November 19, 1990, Gulf Coast Recycling received an amended permit No. AO29-173310 (See Attachment XXI), Specific Condition 9 and 11, were basically the same as Condition 8 and 10 of the previous permit.

Gulf Coast Recycling has complied with the direction from both EPCHC and FDER during the entire course of the permitting of the 60 ton blast furnace and have remained in compliance with the permit limitations associated with permit AO29-173310. The attached table summarizes Gulf Coast Recycling emissions of SO2 for the years 1978 through 1990. A review of this table indicates that the hourly emission rates established by the respective permits were maintained.

AFTERBURNER DESIGN AND CARBON MONOXIDE EMISSION CALCULATIONS

The Orsat method was used to test for CO. Air flow to afterburner from baghouse (data based on October 24, 1991 stack test for particulate):

20,246 dscfm at 3.56% moisture and 154.55°F

$$\begin{aligned} \text{Dry gas} &= 20,246 \text{ dscfm} \times 60 \text{ min/hr} \times (29/385) \text{ lb/ft}^3 \\ &= 91,501 \text{ lb/hr} \end{aligned}$$

$$\begin{aligned} \text{Moisture} &= [20,246 \text{ dscfm}/(1-0.0356)] \times 0.0356 \\ &\quad \times 60 \text{ min/hr} \times (18/385) \text{ lb/ft}^3 \\ &= 2096.5 \text{ lbs/hr} \end{aligned}$$

Heat in Gas Stream at 150°F

$$\begin{aligned} \text{Dry Gas} &= 91,501 \text{ lb/hr} \times 16.82 \text{ BTU/lb} \\ &= 1.539 \text{ MMBTU/hr} \end{aligned}$$

$$\begin{aligned} \text{Moisture} &= 2096.5 \text{ lb/hr} \times 1071.91 \text{ BTU/lb} \\ &= 2.247 \text{ MMBTU/hr} \end{aligned}$$

$$\text{Total} = 3.79 \text{ MMBTU/hr}$$

Heat in Gas Stream at 1400°F (90% destruction combustor Eff. *)

$$\begin{aligned} \text{Dry gas} &= 91,501 \text{ lbs/hr} \times 337.06 \text{ BTU/hr} \\ &= 30.841 \text{ MMBTU} \end{aligned}$$

$$\begin{aligned} \text{Moisture} &= 2096.5 \text{ lb/hr} \times 1699.81 \text{ BTU/hr} \\ &= 3.564 \text{ MMBTU} \end{aligned}$$

$$\text{Heat Losses} = 6.0 \text{ MMBTU/hr (estimated shell loses at approximately 15%)}$$

$$\text{Total} = 40.41 \text{ MMBTU/hr}$$

Heat Required in Afterburner:

$$= 40.41 - 3.79 = 36.62 \text{ MMBTU/hr}$$

Afterburner Fuel Requirements:

Natural gas at 1050 BTU/cf

$$= (36.62 \text{ MMBTU/hr}) / 1050 \text{ BTU/cf}$$

$$= 34,876 \text{ cf/hr (max)}$$

Assumes no heat generated by oxidation of VOC or CO in gas stream.

Emissions from the products of combustion:

POLLUTANT	EMISSION FACTOR (lbs/MMCF)	lbs/hr	TONS/YR (7629 hrs/yr)
TSP	5	0.17	0.67
SO2	0.6	0.02	0.08
NOx	140	4.88	18.62
CO	35	1.22	4.66
VOC (nonmethane)	2.8	0.10	0.37

Emission factors from AP-42 Table 1.4-1 for Industrial Boilers

* Design criteria based on "Incineration Systems Selection and Design", Calvin R Brunner,

P.E.

DISCUSSION ON PSD APPLICABILITY

In order to determine baseline emission rates Gulf Coast Recycling proposed to run a series of stack tests to determine the emission rates for nitrogen dioxide, carbon monoxide, volatile organic compounds and sulfuric acid mists. Testing methodology was developed by Stevenson and Associates and the protocol for testing dated October 10, 1991 was submitted to EPC and FDER for approval (See Attachment XXII). On October 21-25, 1991 and November 4, 1991 having received no indication that the methods proposed were not acceptable to either EPC, FDER or EPA, the testing was conducted on the blast furnace (See Attachment XXIII and XXIV). A summary of the test results were as follows:

Pollutant	Emission Rate (pounds per hr)
Nitrogen Oxide	1.98
Volatile Organic Compounds	33.1
Carbon Monoxide	683.32
Lead	.006
Sulfur Dioxide	260
Sulfuric Acid Mist	0.0
Total Suspended Particulate	0.798
Visible Emissions	0%

The actual emission rates for the 40 ton blast furnace were established by taking the projected annual emissions based on 7629 hours per year and factoring the emission rates by the ratio of the actual production capacity of 2.1 TPH (based on 1983 and 1984) -vs- 3.0 TPH (based on 1990 production rate) to reflect the increase in capacity of the furnace or existing test data was used. The SO2 actual emission rate was previously established using

criteria acceptable to both FDER and EPCHC at 374 pounds per hour in December 1983. FDER and EPC have clearly acknowledged and concluded that in their professional judgement previous data on hourly SO2 emission rates prior to the December 1983 tests were not representative of the actual emissions from the furnace. Therefore after extensive discussions and review of the existing data, FDER and EPCHC concluded and still concludes that one hour runs vs twenty (20) minute runs gave a more representative indication of the hourly emissions from this source. In order to determine a representative annual emission rate for the 40 ton furnace, a review of the annual operating reports was made (Table 4). As allowed under FDER's PSD regulations, the most representative year of data can be used to determine actual emissions. Actual emissions are defined by Section 17-2.100(3), Florida Administrative Code (FAC) as the following:

"(3) "Actual Emissions" - The actual rate of emission of a pollutant from a source as determined in accordance with the following provisions:

(a) In general, actual emission as of a particular date shall equal the average rate, in tons per year, at which the source actually emitted the pollutant during a two year period which proceeds the particular date and which is representative of the normal operation of the source. The Department may allow the use of a different time period upon a determination that it is more representative of the normal operation of the source. Actual emission shall be calculated using the source's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.

(b) The Department may presume that source specific allowable emission for a source are equivalent to the actual emissions of the source provided that, for any air pollutant that is specifically regulated by the EPA under the Clean Air Act, such source specific allowable emissions limits are federally enforceable.

(c) For a source which has not completed start-up and testing on a particular date, actual emission shall equal the potential emissions of the source of that date."

Since the new 60 ton furnace was not brought on line until late in 1984 (See Attachment XVII), Gulf Coast Recycling requests FDER in their PSD applicability determination look at the years 1983 and 1984 as a representative year in order to determine actual annual emissions. Copies of the 1983 and 1984 AORs are enclosed as Attachment XXV and XXVI. We feel this request is in line with FDER's current regulations and with the recent WEPCO* case and EPA's draft New Source Review Workshop Manual dated October 1990.

The applicant is proposing to install an afterburner on the blast furnace to reduce the CO emissions. This will reduce the carbon monoxide emissions rates below the significant emission rate set forth under Table 500-1 (i.e. 100 tons per year). Thus the significance level for CO under PSD will not be triggered. Tables 2 and 3 establishes the estimated emissions, including the product of combustion from the proposed afterburner. The other pollutants listed are either not emitted or are not expected to be admitted in quantities to trigger PSD new source review.

Gulf Coast Recycling is requesting under this after-the-fact permit application that a federally enforceable permit condition be established to limit the hours of operation of this blast furnace to 7629 hours per year. This is the level at which an increase in SO₂ above this proposed federally enforceable baseline would trigger future PSD review.

*Wisconsin Electric Power Company -vs- USEPA, United States Court of Appeals, Seventh Circuit Nos. 88-3264, 89-1339.

It should be noted that two existing permitted 40 ton blast furnaces were on site prior to the installation of the new 60 ton blast furnace (See Attachment 1). Both furnaces were fully operational and vented to the baghouse and at times would operate alternately. To date we have not included the actual emissions for the second unit but here in reserve the right to do so should FDER and/or EPA not approved the baseline determination proposed by the applicant.

NONATTAINMENT NEW SOURCE REVIEW

The area in which this facility is located is classified nonattainment for ozone and is unclassified for particulate and lead. The VOC emissions from the existing 40 ton furnace are estimated to be 85.91 tons per year using the same factors as previously indicated. With the installation of the after burner to control CO emissions, the projected VOC emission rate is 13.00 tons per year. Since the existing blast furnace was less than 100 TPY it is not major as defined in Section 17-2.510(2)(d)2.(a), FAC. which states:

"a. For the affected pollutant, except lead, the sum of the quantifiable fugitive emissions and the potential emissions of all sources at the facility which have the same "Major Group" Standard Industrial Classification (SIC) Code would be equal to or greater than 100 tons per year."

The increase of 40.35 tons per year without the after burner and a negative 72.92 tons per year with the after burner would not increase the emissions over a hundred tons per year and thus the modification to a minor facility would not be considered major in accordance with the new source review procedures established in Section 17-2.510(2)(d)3, FAC. This provision states:

"3. Modification to Minor Facilities. Unless exempted under Rule 17-2.510(2)(a), (b) or (c), a proposed modification to a minor facility shall be subject to the provisions of Rule 17-2.510(4) only if the modification would be a physical change which in and of itself would constitute a new major facility subject to the provisions of Rule 17-2.510(4) pursuant to Rule 17-2.510(2)(d)2."

A review of the particulate data over the life of the facility has basically indicated a decrease in emissions due to improvements in controls and operation/maintenance procedures. Since there is no increase in emissions on an annual basis from the existing 40 ton to the new 60 ton furnace, nonattainable new source review for particulate would not be required.

NEW SOURCE PERFORMANCE STANDARDS

As previously determined by FDER and EPCHC, (See Attachments XIV and XV), this source is subject to the new source performance standards contained in 40 CFR 60 Subpart L entitled Standards for Performance Secondary Lead Smelters since the new 60 ton furnace was constructed after the applicability date of June 11, 1973. Pursuant to 40 CFR 60.122 (1) blast furnace shall not discharge to the atmosphere any gases which contain particulate matter in excess of 0.022 gr/dscf and (2) exhibit 20% capacity or greater. Gulf Coast Recycling has always complied with these emission regulations since startup of this operation whether they have been specifically incorporated as a permit condition or not.

FEDERAL IMPLEMENTATION PLAN FOR LEAD

Pursuant to 40 CFR 52.535(C)(1)(i) and (iv) the emissions from the blast furnace shall not exceed 1.810 pounds of lead per hour and the visible emissions should not exceed 5%. Gulf Coast Recycling has and will comply with these emission regulations for both the existing 40 ton blast furnace and the new 60 ton blast furnace.

RULE APPLICABILITY REVIEW REQUIREMENTS

As indicated above, this new furnace will not trigger either PSD or nonattainment new source review requirements, therefore, the applicable permit regulation should be Section 17-2.520 entitled Source Not Subject To Prevention of Significant Deterioration or Nonattainment Requirements.

In order to make the provisions of the after-the-fact construction permit federally enforceable, Gulf Coast Recycling requests that the following Specific Conditions be placed in the after-the-fact construction permit:

- (1) The hours of operation of the blast furnace shall not exceed 7629 hrs/yr.
- (2) The sulfur dioxide emission shall not exceed 374 lbs/hr and 1426.62 tons per year. Testing is to be conducted using EPA Method 6 or 8 with one hour run time.
- (3) Gulf Coast Recycling will install an afterburner which will be fired on natural gas. A temperature of 1400°F will be maintained for a 0.5 second retention time.

U. S. EPA'S CONCERNS EXPRESSED IN THEIR JUNE 19, 1991 MEMO

In EPA's memo of June 19, 1991 from Brian L. Beals, Chief Evaluation Unit, to Mark A. Armentrout, Chief Northern Compliance Unit, Subject, PSD Determination on Gulf Coast Recycling Inc. (See Attachment XXVII) we offer the following comments.

Gulf Coast Recycling was a major facility prior to the construction of the new 60 ton blast furnace. We disagree with the fact that the installation of the furnace triggered modification as defined in FDER's PSD regulations. The emission sampling reviewed by EPA does not reflect the extensive evaluation and determination by FDER and EPC that the SO₂ emissions prior to the December 1983 test were not representative. A review of the record indicates that the baseline emissions for the 40 ton unit were established at 374 pounds per hour and based on the 1983 and 1984 operating hours, the tons per year baseline level is established at 1368.8 tons per year. With a federally enforceable limitation on the hours placed as a condition of the permit (i.e. 7629 hours per year), the SO₂ emission cap of 1426.62 tons per year would not trigger the significant level of 40 tons per year.

(2) Gulf Coast Recycling relied on the expertise, judgement, and guidance of FDER and EPCHC in determining the need for construction permitting associated with the installation of the new blast furnace. Approval was given by both agencies to install the 60 ton furnace as a permit amendment of the existing operating permit if the baseline emission rates set forth in the permit were not exceeded. Gulf Coast Recycling is hereby submitting an after-the-fact construction permit in order to satisfy this requirement for construction permitting and federal enforceability as required by EPA.

(3) We have reviewed the PSD applicability for particulate matter, lead, carbon monoxide, sulfur dioxide, sulfuric acid mist, and nitrogen oxide and have found that PSD

review is not necessary. Emissions of hydrogen sulfide have not been tested, calculated or evaluated since we have been unable to find test data on the subject matter. Further AP-42 is silent with respect to emission factors for this pollutant.

(4) Best Available Control Technology (BACT) is not required since PSD review has not been triggered.

(5) The emission rates for volatile organic compounds were estimated to be 86 tons per year for the existing 40 ton furnace and thus this source was not considered major. The increase, with or without the afterburner, are both less than 100 tons per year and therefore according to Section 17-2.510, FAC the increase in emissions in and of itself are less than 100 tons per year. Therefore nonattainment review would not be triggered.

(6) EPA's concern about the 50 ton refining kettle has been addressed in the after-the-fact construction permit submitted in 1991 for refining kettle No. 3. An Intent to Issue was signed on February 5, 1992.

TABLE 1

GULF COAST RECYCLING, INC.
 SO2 EMISSION TEST SUMMARY DISCUSSED
 WITH FDER ON NOVEMBER 4, 1983

TEST DATE	PROCESS RATE	SO2 EMISSION RATES Per 20 Minute Run
March 4, 1976 <i>2.8% sulfur 5200 #/hr 145.4 sulfur (in)</i>	2.60 T/hr <i>5,200 #/hr (144.20 / 5200) x 100 = 2.8% sulfur</i>	121.04 - 363.41 130.28 - 390.64 98.47 - 295.41 36.10 - 108.30
November 2, 1976	2.60 T/hr	37.27 33.39 23.78
January 19, 1979	3.2 T/hr	176 172 177
March 26, 1980	4.33 T/hr	255 384 314
January 8, 1981	3.77 T/hr	152 295 188
December 3, 1981	3.10 T/hr	152 89 90
December 13, 1983	3.29 T/hr	96 55 72

*289.39
#/hr
SO2 out
289.39/2 =
144.70 #/hr
S (in)*

TABLE 2

GULF COAST RECYCLING, INC
AFTER-THE-FACT APPLICATION
NET INCREASE IN EMISSIONS COMPARED
TO THE PSD EMISSION RATES

POLLUTANT	EXISTING EMISSIONS (TPY)	POTENTIAL EMISSIONS (TPY) With Afterburner	NET EMISSION INCREASE (TPY)	PSD SIGNIFICANT EMISSION RATE (TPY)	P S D
Sulfur dioxide	1386.79	1426.62	39.91	40	N
Particulate Matter (TSP)	9.25	3.71	-5.54	25	N
Particulate Matter (PM10)	9.25	3.74	-5.54	15	N
Nitrogen dioxide	5.14	21.28	15.89	40	N
Carbon monoxide	1773.63	265.31	-1508.31	100	N
Volatile organic compounds	85.91	13.00	-72.92	40	N
Lead	6.69	0.0229	-6.67	0.6	N
Sulfuric acid mist	0.0	0.0	0.0	7	N
Total fluorides	N/A	N/A	N/A	3	N
Total reduced sulfur	N/A	N/A	N/A	10	N
Reduced sulfur compounds	N/A	N/A	N/A	10	N
Hydrogen sulfide	No Data	No Data	No Data	10	
Asbestos	N/A	N/A	N/A	0.007	N
Beryllium	N/A	N/A	N/A	0.0004	N
Mercury	N/A	N/A	N/A	0.1	N
Vinyl chloride	N/A	N/A	N/A	1	N
Benzene	N/A	N/A	N/A	0	N
Radionuclides	N/A	N/A	N/A	0	N
Inorganic arsenic	0.0463	0.0152	-0.0310	0	N

TABLE 3
 GULF COAST RECYCLING
 PSD APPLICABILITY REVIEW WITH AND WITHOUT AFTERBURNER

APR-16-97 08:42 FROM: GULF COAST RECYCLING ID: B13 622 0388

POLLUTANT	1991 TESTED EMISSION RATE LBS/HR	POTENTIAL EMISSION RATE TONS/YR (7629 HRS/YR)	40 TONS FURNACE EMISSION RATE TONS/YR (7416 HRS/YR)	NET EMISSION INCREASE TONS/YR	AFTERBURNER EMISSIONS TONS/YR	NET EMISSION INCREASE W/AFTERBURNER TONS/YR	PSD SIGNIFICANT EMISSION RATE TONS/YR	PSD REVIEW REQUIRED (YES/NO)
particulate matter(TSP)	0.798	3.04	9.25*	-6.21	3.71	-5.54	25	No
particulate matter(PM10)	0.798	3.04	9.25*	-6.21	3.71	-5.54	15	No
sulfurDioxide	374**	1,426.62	1,386.79	39.83	1,426.70	39.91	40	No
Nitrogen Dioxide	1.98	7.55	5.14	2.41	21.03	15.89	40	No
Carbon Monoxide	683.32	2,606.52	1,773.63	832.90	265.31	-1,508.31	100	No
volatile Organic Compounds	33.1	126.26	85.91	40.35	13.00	-72.92	40	No
lead	0.0060	0.0229	6.69***	-6.6671	0.0229	-6.67	0.6	No
sulfuricAcid mist	0	0	0	0	0		7	No
Arsenic	0.0040	0.0152	0.0463	-0.0310	0.0152	-0.0310	0	No

Based on Average TPY emission rate of 1983 and 1984 (See Table 4).
SO2 Baseline Emission Rate per December 1983 Tests.

Based on 1984 AOR.

Assume 0.5% of particulate emission per EPA-600/2-79-116 dated
June 1979 entitled Evaluation of Stationary Source Particulate
Measurement Methods Volume V, Secondary Lead Smelters (Attachment XXIX).



March 28, 1997

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APR 01 1997

BUREAU OF
AIR REGULATION

Mr. John Reynolds
Florida Department of Environmental Protection
2600 Blair Stone Road
Twin Towers Office Building
Tallahassee, Florida 32399-2400

RE: Gulf Coast Recycling, Application No. PSD-FL-215

Dear Mr. Reynolds:

As you requested, this letter is to confirm our telephone conversation of March 24, 1997 concerning the performance of GNB Technologies Inc.'s desulfurization system at their Columbus, Georgia facility. Based upon approximately four months of data, from October 1996 through January 1997, it appears that GNB is reducing the sulfur content of their paste material by approximately 89%. It should be noted that this facility is quite new and is still improving the process units, including the desulfurization system. GNB maintains that 98% removal, as indicated in their construction application, is still feasible and remains their target level.

Despite this information, we continue to believe that desulfurization remains the best alternative for Gulf Coast Recycling, given its superior economics and lack of environmental impacts. This is compared to scrubbing's prohibitive costs and waste stream generation. We believe that this project warrants the acceptance of desulfurization, even if the emissions reductions are not quite equal to that of scrubbing. A primary reason for this is the location of Gulf Coast. They are located in an urban area that is also home to several large power plants that collectively emit in excess of 130,000 lbs of SO₂/hr, compared to Gulf Coast's proposed 175 lbs/hr. Any additional reductions from this proposed limit will result in much higher and burdensome costs to Gulf Coast with very little additional benefit to air quality. We believe the PSD regulations allow for these considerations.

We hope you will consider this information in your final determination. Please contact me at (770) 395-0464 or George Townsend at Gulf Coast at (813) 626-6151 should you have any questions or require additional information.

Sincerely,

LAKE ENGINEERING, INC.

A handwritten signature in black ink, appearing to read 'Larry G. Carlson'.

Larry G. Carlson, QEP
Air Pollution Compliance Specialist

LGC:slf

cc: George Townsend, Gulf Coast Recycling, Inc.
Kristen Spangler, GNB Technologies Inc.

460.2.1\460-97\0328REYN.23L

SUITE 500, 35 GLENLAKE PARKWAY
ATLANTA, GEORGIA 30328
(770) 395-0464 FAX: (770) 395-0474

cc: B: Thomas, SWD
G. Campbell, HCEPC
EPA
J. Smallwood, P.E.
J. Reynolds, BAR

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EXECUTIVE DIRECTOR

ROGER P. STEWART

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

FAX TRANSMITTAL SHEET

DATE: 3/18/97

TO: John Reynolds

FAX PHONE: DARM VOICE PHONE: _____

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FROM: Terry Campbell

(CIRCLE APPLICABLE SECTION BELOW)

AIR DIVISION

- ENFORCEMENT
- ENGINEERING
- SUPPORT OPERATIONS

SPECIAL INSTRUCTIONS: The desulfurization system is
about ready to go. Are we now close to a
BACT determination? Please advise.

**GULF COAST RECYCLING, INC.**

1901 NORTH 66th STREET • TAMPA, FLORIDA 33619
PHONE: (813) 622-6151 FAX: (813) 622-8388

March 14, 1997

Mr. Jerry Campbell
Chief, Air Compliance Section
Environmental Protection Commission of
Hillsborough County
1410 N. 21st Street
Tampa, FL 33605

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MAY 17 1997
EPC/HC
AIR MANAGEMENT

Re: Consent Order No. 95-0728SKW057

Dear Mr. Campbell:

The purpose of this letter is to inform you that Gulf Coast Recycling, Inc. (GCR) has completed the modifications to the Blast Furnace lead well hood. The modifications included the redesign of the hood to facilitate a more efficient capture system.

With the completion of the lead well hood modification there are three tasks remaining under the referenced consent order.

- 1.) Installation of the Battery Recycling System w/Desulfurization Equipment - 03/31/97
- 2.) Final project report - 04/15/97
- 3.) Install Afterburner - 06/23/97

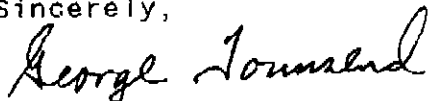
Task number one is complete. The new building is complete and all of the battery recycling equipment and the desulfurization reactors are installed. Currently the manufacturer's representative is conducting a performance check of the equipment

Page 2 of 2
Mr. Jerry Campbell
March 14, 1997

and we expect the system to be operational in the very near future. At this time GCR has purchased the gas train assembly for the afterburner from North American Manufacturing Company and have completed preliminary structural design drawings. We have also initiated the afterburner process design and layout drawings.

Should you have any questions or comments on the above, please let me know.

Sincerely,



George Townsend
Director, Regulatory Affairs

pc: Willis M. Kitchen
William B. Taylor

File:GTA4-480

**GULF COAST RECYCLING, INC.**

1901 NORTH 66th STREET • TAMPA, FLORIDA 33619
PHONE: (813) 626-6151 FAX: (813) 622-8388

March 14, 1997

Mr. Jerry Campbell
Chief, Air Compliance Section
Environmental Protection Commission of
Hillsborough County
1410 N. 21st Street
Tampa, FL 33605

RECEIVED
MAR 17 1997

RECORDING
AIR MANAGEMENT

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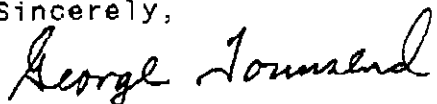
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Page 2 of 2
Mr. Jerry Campbell
March 14, 1997

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Should you have any questions or comments on the above, please let me know.

Sincerely,



George Townsend
Director, Regulatory Affairs

cc: Willis M. Kitchen
William B. Taylor

File:GTA4-480

COMMISSION

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ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

FEB 27 1997

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AIR REGULATION

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TO: Al Limer

FAX PHONE: DARM VOICE PHONE: _____

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FROM: Terry Campbell

(CIRCLE APPLICABLE SECTION BELOW)

AIR DIVISION

- ENFORCEMENT
- ENGINEERING
- SUPPORT OPERATIONS

SPECIAL INSTRUCTIONS: _____

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ED TURANCHIK

EXECUTIVE DIRECTOR

ROGER P. STEWART



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WETLANDS MANAGEMENT DIVISION
TELEPHONE (813) 272-7104

MEMORANDUM

DATE: February 26, 1997

TO: John Glunn

FROM: Jerry Campbell *Jc*

SUBJECT: Modelling of Gulf Coast Recycling (GCR)

Pursuant to Rule 62-296.603(3), F.A.C., GCR modelled their facility's lead emissions and submitted the results with their lead RACT permit application in September of 1994. While we have no documentation in our file that Tallahassee reviewed it, Liz Deken says she sent a copy to Tom Rogers who approved it. The RACT permit was eventually issued with the understanding this required compliance demonstration had been successfully completed.

Enclosed is a diskette which lists the modelling results. The input included point and area sources. We reverified the point source data and surprisingly it still fits the facility (see attachment #1). In fact, our recent discussions with George Townsend of GCR indicates these stack parameters will not change significantly even after the installation of the desulfurization system and the afterburner. However, if CAPS' pending BACT determination for SO₂ requires greater control efficiency than the desulfurization can deliver, then additional controls would be necessary and the blast furnace stack could change. John Reynolds and Al Linero would probably have the best feel for how that BACT will turn out.

We also checked the area source calculations used in the model. Although these are not as precise and require considerable judgement, the area source estimates appear to be a reasonable approximation of the unconfined emissions from GCR as it currently stands. Thus we would not suggest any changes to the area source input.



John Glunn
Memorandum
February 26, 1997
Page 2

Unless we are authorized to take credit for the further reductions required by the MACT, or the blast furnace stack changes because of the BACT for SO₂, or there is a need to rerun the model using an updated version of ISC; then we recommend that the model run in 1994 be submitted to the EPA as proof that the proposed RACT program demonstrates compliance for the GCR. Please keep us advised.

Attachments

cag

cc: Al Linero
George Townsend

ATTACHMENT #1

Gulf Coast Recycling

Emission Unit	Stack Height (M)	Stack Diameter (M)	Stack Temperature (°K)	Stack Velocity (M/S)	Allowable Pb Emissions (g/s)	
					<u>RACT</u>	<u>MACT.</u>
Blast Furnace	46	0.92	338	15.9	0.1999	<u>0.0174</u>
Tapping	11	0.32	315	22.9	0.0077	<u>0.0033</u>
Charging	20	0.56	305	21.4	0.0229	<u>0.0100</u>
Refining Area	9	0.66	303	21.7	<u>0.0033</u>	0.0144
Slag Processing	8	0.36	294	14.3	<u>0.0001</u>	0.0026

FAX Transmission

From: Michael E. Stout M.A. Industries
Questions? Call 770-487-7761 307 Dividend Drive, P.O. Box 2322
Fax 770-487-2710 Peachtree City, GA 30269
To: Mr. John Reynolds
Company: Florida Dept. of Environmental Protection, Bureau of Air Regulation
FAX: 904-922-6979
Ph: 904-488-1344

Address:

Date: February 3, 1997

Time: 10:04 AM

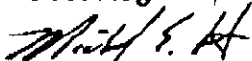
Pages: 1 (including this one)

It was a pleasure to talk with you yesterday. As I mentioned to you, a typical desulfurization installation will reach between 1-1.5% sulfur in the treated paste. Rewashing steps can be employed to expose more sulfur units to the soda ash. I would guess in theory that you could reach 95% removal by a series of rewashin steps. However, the draw back to this is the cost of large reactors, agitators, motors and extra sets of filter press units.

We have not done any testing to try to attain these levels because of the prohibitive capital cost of the equipment. If a potential customer approached us and asked for 95% sulfur removal, our probable response would be to propose an additional washing step but we would not be able to give any guarantees given the fact that we have no practical experience in reaching these levels.

I wish I could be of more help to you in this area. Please let me know if we can be of any other assistance.

Best Regards,



Michael E. Stout

M.A. Industries

COMMISSION

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JIM NORMAN
ED TURANCHIK
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ECOSYSTEMS MANAGEMENT DIVISION
TELEPHONE (813)272-7104

EXECUTIVE DIRECTOR

ROGER P. STEWART

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

FAX TRANSMITTAL SHEET

John Reynolds

DATE: 1/10/97

TO: ~~John Reynolds / Al Linceo~~

FAX PHONE: DARM

VOICE PHONE: _____

TOTAL NUMBER OF PAGES INCLUDING THIS COVER PAGE: 2

EPC FAX TRANSMISSION LINE: (813) 272-5605

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FROM: Terry Campbell

(CIRCLE APPLICABLE SECTION BELOW)

AIR DIVISION

-ENFORCEMENT

-ENGINEERING

-SUPPORT OPERATIONS

SPECIAL INSTRUCTIONS: Agree w/ your second paragraph
conclusions. Getting an additional 20% fee
for a \$30,000 capital expenditure annualized over 20
years could be very cost effective.

Dear Mr. Kitchen:

During our teleconference last November it was agreed that Gulf Coast Recycling would consult immediately with desulfurization equipment suppliers and then report the details to us on how advanced desulfurization technology could be applied at your facility. The December 27 submittal does not indicate that the equipment supplier provided much in the way of new information. The generic information provided appears to have come solely from sales literature. The enclosed letter from M. A. Industries specifying the sulfur content of the repulped paste is the same one that is currently in the permit file (over one year old), so it does not appear that much of an investigation was made. Therefore, we will conduct the research and keep you informed of our findings.

Your letter concluded that repulping (and refiltering) results in an unjustifiably small increase in sulfur removal efficiency of only 0.5 to 1.0%. The M. A. Industries letter states that the paste sulfur content is reduced from 1.5 % (average) to 0.5-1.0%, reflecting a 33 to 66% sulfur content improvement due to repulping. For example, if 10,500 lb. Pb scrap/hr with 4.5% sulfur (473 lb. S/hr) enters a 66%-efficient first stage desulfurization unit, 312 lb. S/hr will be removed leaving 161 lb. S/hr going to the furnace at about 1.5% S content. With a second 66% efficient stage, only 54.7 lb. S/hr would be going to the furnace, resulting in the removal of an additional $161 - 54.7 = 106.3$ lb. S/hr (about 1% S content). Overall sulfur removal efficiency is thus increased from 66% to 88.4% by the addition of the second stage. "Sulfur content" is not the same as "sulfur removal".

If there are questions regarding the above, please contact me or John Reynolds at (904) 488-1344.

Sincerely,



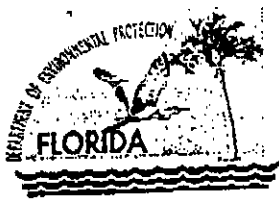
A. A. Linero, P.E.
Administrator
New Source Review Section

AAL/jr

c: B. Thomas, SWD
J. Campbell, EPCHC
B. Beals, EPA
S. Smallwood, P.E.

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

Printed on recycled paper.



Department of Environmental Protection

Lawton Chiles
Governor

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

January 6, 1997

Virginia B. Wetherell
Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Willis M. Kitchen, President
Gulf Coast Recycling, Inc.
1901 North 66th Street
Tampa, Florida 33619

RECEIVED

JAN 09 1997



Department of Environmental Protection

Lawton Chiles
Governor

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2600 Blair Stone Road
Tallahassee, Florida 32399-2400

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Secretary

January 6, 1997

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Willis M. Kitchen, President
Gulf Coast Recycling, Inc.
1901 North 66th Street
Tampa, Florida 33619

RE: GCR's December 27 Letter on Advanced Desulfurization (PSD-FL-215)

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If there are questions regarding the above, please contact me or John Reynolds at (904) 488-1344.

Sincerely,

A. A. Linero, P.E.
Administrator
New Source Review Section

AAL/jr

c: B. Thomas, SWD
J. Campbell, EPCHC
B. Beals, EPA
S. Smallwood, P.E.

old at line over top of envelope to
 [Redacted]

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Willis M. Kitchen, Pres.
 Gulf Coast Recycling
 1901 N. 66th St.
 Tampa, FL 33619

4a. Article Number
 P265 659 127

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

7. Date of Delivery
 1-9-97

5. Received By: (Print Name)
 [Signature]

6. Signature: (Addressee or Agent)
 X

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

is your RETURN ADDRESS completed on the reverse side?

Thank you for using Return Receipt Service.

PS Form 3811, December 1994

Domestic Return Receipt

P 265 659 127

US Postal Service
Receipt for Certified Mail

No Insurance Coverage Provided.
 Do not use for International Mail (See reverse)

Sent to
 Willis M. Kitchen
 Street & Number
 Gulf Coast Recycle
 Post Office, State & ZIP Code
 Tampa FL

Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	PSD-FI-215 1/7/97

PS Form 3800 April 1995