

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)488-1344.

Sincerely,

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

CHF/ir

c: J. Campbell, EPCHC

B. Thomas, SWD

B. Beals, EPA Region IV

L. Carlson, Lake Eng.

S. Smallwood, ERM

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0570057-002-AC PSO-F1-215

PS Form, 3800,



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

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

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

: B. Thomas, SWD

J. Campbell, EPCHC

B. Beals, EPA

S. Smallwood, P.E.

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Date: From: Subject: To: 4/13/98 10:10:15 AM John Reynolds TAL Gulf Coast Recycling 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").

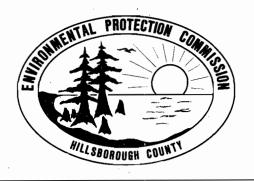
I view this as a breach of the agreement with GCR that they would install the additional repulping step (advanced desulfurization) if the basic desulfurization did not achieve 75% sulfur removal. Looks like it's time for another "Tarmac"-type resolution. You agree?

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

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

MEMORANDUM

DATE:

March 31, 1998

TO:

Al Linero

FROM:

Jerry Campbell

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 issued 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.

pg

DOTTIE BERGER
JOE CHILLURA
CHRIS HART
JIM NORMAN
JAN PLATT
THOMAS SCOTT
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EXECUTIVE DIRECTOR

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WETLANDS MANAGEMENT DIVISION TELEPHONE (813) 272-7104

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

Teny Campbell

Attachment

cag

cc: William B. Taylor, IV, Esq.

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

EXECUTIVE DIRECTOR

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WETLANDS MANAGEMENT DIVISION TELEPHONE (813) 272-7104

MEMORANDUM

DATE:

March 10, 1998

TO:

Files

FROM:

Jerry Campbell

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	SignificanceTrigger	Comment
SO ₂	683	8121	<0	40	No BACT Required
Pb	0.3	>.3	<0	.3	No BACT Required
PM	20.3	5.92	14.4	15 (PM10)	No BACT Required
co	300	15803	<0	100	No BACT Required
NOx	NA	5	<40	40	Minor w/o Controls
VOC	116	774	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>	SCC No.
Furnace Operations	3-04-004-03 3-90-008-99 3-04-004-99
Refining Operations	3-04-004-07 3-04-004-09
Miscellaneous	3-04-004-14 3-05-007-12 3-05-007-09

The facility is located at 1901 N. $66^{\rm th}$ 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 a s 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 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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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

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WASTE MANAGEMENT DIVISION TELEPHONE (813) 272-5788

WETLANDS MANAGEMENT DIVISION TELEPHONE (813) 272-7104

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.

may be downl 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.

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.

Roger P. Stewart
Executive Director

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

CERTIFICATE OF SERVICE

	This	is	to	certify	that	thi	s NOTIC	E OF	PERMIT	and	all	copies
were	ma	aile	ed	before	9	the	clo	se	of	busi	ness	on
					to	the	listed	pers	ons.			

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

JUAFT

Clerk Date

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

EXECUTIVE DIRECTOR

ROGER P. STEWART



WATER MANAGEMENT DIVISION ADMINISTRATIVE OFFICES, LEGAL & 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

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 The batteries are processed Batteries arrive by truck. 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 chase of the furnace. ב

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

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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 permitee, 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:

Source

Blast Furnace Refining Kettles

Slag Processing Soda Ash Silo

Process Rate

6.5 tons charged/hour*
56 tons of lead scrap charged
per batch per kettle
6 tons of slag processed/hr.
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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Permit/Certificate No.: 0570057-002-AC, 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.]

				tons per
			lbs/hr	12 months
Blast and Agglomerating F	Turnace	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:

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

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

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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 $\rm CO_2$, 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 permitee 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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Permit/Certificate No.: 0570057-002-AC, 0570057-008-AC, 0570057-009-AC
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.

Permit/Certificate No.: 0570057-002-AC, 0570057-008-AC, 0570057-009-AC 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.]

<u>Miscellaneous Operations</u> (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.]

Permit/Certificate No.: 0570057-002-AC, 0570057-008-AC, 0570057-009-AC

Project: Secondary Lead Smelting Facility

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 quanity 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.

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N) Vacuum the pavement in the furnace area with a HEPA filter equipped vacuum or wet pavement with water at least twice a day.

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

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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 (X) Sulfur Dioxide Outlet of Afterburner)

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)

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

ALBAFT

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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Permit/Certificate No.: 0570057-002-AC, 0570057-008-AC, 0570057-009-AC 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).

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

UBAFT

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 $50^{\circ}F$ 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

PERMITTEE:
Gulf Coast Recycling, Inc.

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

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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 For hydrocarbon and carbon monoxide control, best operational. 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, 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. 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.]

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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:

- 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 Condiont 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. Not withstanding 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.

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

Roger P. Stewart Executive Director

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TABLE I

ALLOWABLE EMISSIONS																
	PM			Opacity Pb			NOx		voc		С	0	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	TPY
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		NA
REFINING OPERATIONS							-									
(3) Refining Kettles	0.013	1.76	5.2	3%	0.0002	0.08	NA			NA		NA		NA		NA
MISCELLANEOUS		-		<u> </u>			1		· ·		 		_			
Slag Processing			0.4	3.8	0.0000333	0.00	NA			NA		NA		NA		NA
Facility Grounds and Miscellaneous Operations				3%												
Soda Ash Silo			0.4	5%]	
TOTALS			20.3	1		<0.3	NA		1	116		300		683		507

TECHNICAL EVALUATION

DNA

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 30329

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.

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

The facility is located at 1901 N. 66^{th} 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 a s 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 bashouse 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 7,100 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 VCC 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 62-296.600, 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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	FM			Opacity	Pb	НОх	voc			СО		SO ₂ - Prior to 7/01/2001		SO ₂ - Commencing 7/01/2001		
	gr/dscf	11./Er	TPY		gr/dscf	TPY	TPY	PPM	lb/hr	YPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
FURNANCE OPERATIONS																
Blast and Agglomerating Furnace	0.001	0.15	- 14.6	0	0.00016	<0.14	<10	< 360		<167	< €8	<300	<175	<683	<130	<507
Tapping Operations	70.00	0.61	7.2	0	0.00085	<0.02			<0.44	<1.72					· · · · · · · · · · · · · · · · · · ·	AII
Charging Operations	0.000	0.01	5.1	0	0.00002	<0.05				ļ						AII
REFINING OPERATIONS														<u> </u>		
(3) Refining Kettles	0.00	0.11	+10.44	0	0.0000	<0.08	ASS			IIA .		IIĀ.		AII		IIA
MISCELLANEOUS		 	ļ			<u> </u>	├	 	 	 			,	 		
Slag Processing	0.00	0.00	- 1	0	0.000010	0.00	Alf	 	 	11A	1	NA.		NA -	·	- 40
Facility Grounds and Hiscellaneous Operations				0		0.42										
Soda Ash Silo			<1	<5%									1		·	
TOTALS			₹32.3			<1	<10			<169		<300	†	<683	<130	<507

						ALI	AWO.	BLES								
	FM.			Opacity	dq	NOX	Voc		СО		50: - Prior to		SO ₂ - Commencing 7/01/2001			
	gr/dscf	11.7fa	TPT		gr/dscf	TPY	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	3 %	0.00087	0.14	AII	360		167	68	300	175	683	130	507
Tapping Operations	0.022	0.57	::::	31	0.00087	0.02	AH		0.44	1.72		AII	-	IIA		AII
Charging Operations	0.022	1.11	41	31	0.00087	0.05	AII					AII		IIA		NA .
REFINING OPERATIONS							1				-		 			
(3) Refining Kettles	0.03	3.40	10.44	3 t	0.0002	0.08	AII			AII		11A		DA		AII
MISCELLANEOUS				-			1	-	- 	-	·	-			ļ	-
Slag Processing			· i	31	0.0000333	0.00	AII			11A		117.	- 	11/4	· ——	114
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TOTALS			32.3			<1	AII	1		<169		300	<u> </u>	683	{	507

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 190 175 230

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

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

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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. 66^{th} 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. 66^{th} 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 AVAILABLE COPY

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,

DBAFT

Roger P. Stewart Executive Director

cc: Florida Department of Environmental Protection Frank J. Burback, 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

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



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

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WETLANDS MANAGEMENT DIVISION TELEPHONE (813) 272-7104

EXECUTIVE DIRECTOR

ROGER I! STEWART

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 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 SO. 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 An agglomerating furnace is used to melt flue dust of the furnace. 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 ingcts. 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

DEAFT

(including battery breaking operation

Incorporates Permit No.: AC29-258634

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

Project: Secondary Lead Smelting Facility

SPECIFIC CONDITIONS:

PERMITTEE:

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.]
- 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:

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

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* 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.

PERMITTEE: Gulf Coast Recycling, Inc.

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

SPECIFIC CONDITIONS:

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)

- 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.]
- 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. 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 296.700, F.A.C.
- The permittee shall not discharge opacity to exceed the following:
 - A) 33 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 $C0_2$, to the atmosphere from the blast furnace [40 CFR 63 Subpart X and Rule 62-204.800, F.A.C.] PRAFI

PERMITTEE: Gulf Coast Recycling, Inc.

Permit/Certificate No.: 0570057-002-AC. 0570057-008-AC, 0570057-009-AC

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 agglamerating furnaces. [Construction Permit Application and Rule 61-112.300, F.A.C.
- 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 permitee 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

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certificate No.: 0570057-002-AC, 0570057-008-AC, 0570057-009-AC 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/ducf, 3.48 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

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PERMITTEE:
Gulf Coast Recycling, Inc.

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

<u>Miscellaneous Operations</u> (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:
Gulf Coast Recycling, Inc.

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

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 quanity 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 it a 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.

Permit/Certificate No.: 0570057-002-AC, 0570057-008-AC, 0570057-009-AC

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 Adglomeration Furnace Exhaust Stack

(X) Pb (X) Hydrocarbons (Inlet and Outlet of Afterburner)

(X) PM (X) Opacity

(X) Carbon Monoxide(Inlet and (X) Sulfur Dioxide Outlet of Afterburner)

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

Blast Furnace Charging Enclosure

(X) Cpacity (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

PERMITTEE:
Gulf Coast Recycling, Inc.

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

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 62-4.670, 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. Permit/Certificate No.: 0570057-002-AC, 0570057-008-AC, 0570057-009-AC 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 62-210, 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_

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 For hydrocarbon and carbon monoxide control, best operational. 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 62-210.7001
- 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:

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- 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 menitor 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. Not withstanding 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), (d), (h)(1-3), h(5-6), and (j); 63.10; and 63.12-15.

Concluding Conditions

- 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.]
 - Alteration or replacement of any equipment or major component of such equipment.
 - 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

Roger P. Stewart Executive Director

TABLE I

		1			ALL	OWAB1	LE E	MIS	SIONS							
		H		Opacity	city Pb		NOx		VOC				SO ₂ - Prior to 7/01/2001		SO: - Commencia 7/01/2001	
	gr/dscf	16/hi	TPT		gr/dscf	TPY	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	31	0.00087	0.14	AII	360		167.0	£Ġ	300	175	683	130	507
Tapping Operations	0.022	0.57	1	31	0.00087	0.02	AII		0.44	1.72		AII		IIA .		AII
Charging Operations	0.022	1.31	5.1	31	0.00087	0.05	ASI		<u> </u>			All		NA .		NA.
REFINING OPERATIONS									1				1	1		
(3) Refining Kettles	0.03	3.48	16.44	3 t	0.0002	0.08	AII			NA.		NA		NA.		NA .
MISCELLANEOUS	 	1					-	·	-	-			-	-	{	-
Slag Processing Facility Grounds and Miscellaneous Operations			- 1	3 t	0.0000333	0.00	NA			HA		AII		1114		114
Soda Ash Silo TOTALS		1	32.3	51		<0.3	HA			168.7		300	-	ć 8 3	 	507

67 1 ...

EPC/HC AIR MANAGEMENT Fax:813-272-5605

May 30 '97 16:03 P. 02/02

COMMISSION DOTTIE BERGER JOE CHILLURA CHRIS HART JIM NORMAN

JAN PLATT THOMAS SCOTT ED TURANCHIK

EXECUTIVE DIRECTOR

ROGER P. STEWARY



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 Campbe

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

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TELECOPY TRANSMITTAL

	TO: John Reynolds
11 1	COMPANY: FOE
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	TELECOPY NO: 1-904-922-6979
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	DATE: 5/24/27 TIME: AM PM
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Should yo	ou have any problems receiving this telecopy, please 6) 626-6151.

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

WIN TOWERS OFFICE SUILDING 1500 BLAIR STONE ROAD TALLAMASSEE, FLORIDA 27201



BOB GRANAM GOVERNOR VICTORIA L 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 understance the applicant's rights under th) and 405.0876, Florida Statutes, and fully at section.
applicant hereby with full knowledge and under Sections 120.60(2) and 403.0876, Florida State inns 120.60(2) and 403.0876, Florida State cenied by the State of Florida Department of time period prescribed in Sections 120.60 waiver in made Freely and voluntarily by the	of August 1997.
	varves on benefit of the applicant.
Sworn to and subscribed Defore ⊐e this <u>27th</u> day	Willis M. Kitchen, President Please Type Name of Signee
of <u>May</u> 19 <u>97</u>	May 27, 1997
cooder Bud Courax	Date
ANT POR	

Protecting Florida and Your Quality of Life

Page 1 of 2

My Commission CC604225 Expires August 7, 1998

DER Form 17-1.201(8)

Effective November 30, 1982

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM GOVERNOR

VICTORIA J. TSCHINKEL SECRETARY

RECEIVED

MAY 3 U 1997

BUREAU OF AIR REGULATION

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

License (Permit, Certification) Application No. $\underline{PSD-FL-215(0570057-002-AC)}$

Applicant's Name: Gulf Coast R	ecycling, Inc.
The undersigned has read Sections 120.60(2) understands the applicant's rights under that	
With regard to the above reference license applicant hereby with full knowledge and u under Sections 120.60(2) and 403.0876, Florida Statudenied by the State of Florida Department of time period prescribed in Sections 120.60(2 waiver is made freely and voluntarily by the interest, and without any pressure or coer Florida Department of Environmental Regulation This waiver shall expire on the 15 th day of	nderstanding of (his) (her) (its) rights ida Statutes, waives the right under Sectes, to have the application approved or Environmental Regulation within the 90 day 1) and 403.0876, Florida Statutes. Said applicant, is in (his) (her) (its) selfcion by anyone employed by the State of in.
This walver shall explice on the day or	*/
The undersigned is authorized to make this wa	iver on behalf of the applicant.
	Willis M. Kitchen
	Signature
	Willis M. Kitchen, President
Sworn to and subscribed	Please Type Name of Signee
before me this <u>27th</u> day	W 27 : 1007
of <u>May</u> 19 <u>97</u> .	May 27, 1997
coodered sud Carak	Da t e

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

Karen Sue Erickson My Commission CC604226 Expires August 7, 1998

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)488-1344.

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

The right of the return address

	of all line over top of envelope to	NOT:			
rse side?	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 card to you.	I also wish to receive the following services (for an extra fee):			
the reverse	 Attach this form to the front of the mailpiece, or on the back if spac permit. Write "Return Receipt Requested" on the mailpiece below the article 	 1. ☐ Address 2. ☐ Restrict 			
on th	The Return Receipt will show to whom the article was delivered andelivered.	d the date	Consult postmaster for fee.		
completed	3. Article Addressed to: M. Willis M. Kitchen, Pras. Yuly Coast Recycling 1901 N. Lath Street	4a. Article No.	39 251	191	
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DRES	Jan-pa, Fl 33619		ceipt for Merchandise	☐ Insured .	
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povised

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

1. <u>APPLICATION INFORMATION</u>

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.		

3.2 Background Information

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

T 0 1000	COD
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
D 1002	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
T 00 1005	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
ŕ	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
Way 11, 1995	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
Aug.20, 1993	1996 in advance of DEP's BACT determination.
Aug.29, 1995	GCR submitted a request for an increase in allowable blast furnace charge rate
Aug. 29, 1993	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
Sep. 6, 1993	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
Oct. 0,1993	_ , , , , , ,
	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	USDOI 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
1 /	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
0 01.22,1330	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
Tul 25 1006	requirements. DEP responded to CCP's July 22 letter combining that Puls 62 212 400(2)(94)
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 repupling 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

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 mechnically 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

Rule 62-204.360	Designation of Prevention of Significant Deteriortion 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				,				

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. <u>CONCLUSION</u>

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

Permit Engineer: Meterologist:	. <u></u> -
Reviewed and Approved by A. A Linero, P.E.	
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TECHNICAL EVALUATION

AND

PRELIMINARY DETERMINATION

(Ecrtepa)

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

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

> Tampa i FC Hills Co.

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

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).

Gulf Coast Recycling, Inc. Blast Furnace Air Permit No. 0570057-001-AC PSD-FL-215

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.

Gulf Coast Recycling, Inc. Blast Furnace

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

- 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.
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- Dec.4,1995- USDOI 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.
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- 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.
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Gulf Coast Recycling, Inc. Blast Furnace

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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.
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- 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%.
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- 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. Plans call for reaching 98% through further refinements.

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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

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

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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

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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 Deteriration 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 /	PM/PM ₁₀	2.82	11.69	6.00	26.28
078	$\overline{\mathbf{F}}$	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	Pollutants	New Allowable	
Unit ID		lb/yr	ton/yr
Common Stack /	PM/PM ₁₀	6.00	26.28
103	F	0.53 (a)	1.63

COMBINED AFI PLANTS No. 1 & No. 2

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

Gulf Coast Recycling, Inc. Blast Furnace Air Permit No. 0570057-001-AC PSD-FL-215

Total Emissions from Fuel Combustion

Pollutants	No.2 Fuel Oil		Natu	ral Gas
Tonutants	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
СО	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.

Gulf Coast Recycling, Inc. Blast Furnace

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

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 PM₁₀ 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 PM₁₀ monitor in the vicinity of the facility (Gardinier Park) are used to fulfill the PM₁₀ monitoring requirement and to establish a PM₁₀ background concentration for use in the AAQS analysis. The table below shows that NO₂ 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 NO₂ (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 NO₂ monitor located in the vicinity of the project (Gandy Boulevard) is used to establish a background concentration. Background concentrations for PM₁₀ and NO₂ are 20 ug/m3 and 21 ug/m3, respectively.

Gulf Coast Recycling, Inc. Blast Furnace

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

Pollutant	Avg. Time	Max Predicted Impact ¹ (ug/m³)	Impact Greater Than De Minimus?	De Minimus Level (ug/m³)			
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 1 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

Gulf Coast Recycling, Inc. Blast Furnace

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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/m³)	Significant Impact Level (ug/m³)	Significant Impact?	Radius of Significant Impact (km)
PM ₁₀	Annual	2.2	1	YES	3
1 14110	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)

		Max. Predicted	Significant	National Park	
Pollutant	Averaging	Impact at Class I	Impact?	Service (NPS)	
	Time	Area(s)	•	Significant Impact	
		(ug/m ³)		Level	
		(46)	,	(ug/m ³)	
				(ug/m/)	
DN 4	Annual	0.004	NO	0.08	
PM ₁₀	24-hour	0.09	NO	0.27	
		l		,	
NO ₂	Annual	0.003	NO	0.025	

As shown in the tables the maximum air quality impacts due to PM_{10} 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 PM_{10} and NO_2 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.

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/m³)	Impact Greater Than Allowable Increment?	Allowable Increment (ug/m³)
DM	Annual	1.0	NO	17
PM ₁₀	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/m³)	Background Conc. (ug/m³)	Total Impact (ug/m³)	Total Impact Greater Than AAQS	Florida AAQŚ (ug/m³)
PM ₁₀	Annual	23	20	43	NO	50
	24-hour	93	20	113	NO	150
NO	Ammual	2.5	21	5.0	NO	100
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).

Gulf Coast Recycling, Inc. Blast Furnace

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

Fluoride Impacts

8- hour		24- hour		
Impact (ug/m³)	ARC (ug/m³)	Impact (ug/m³)	ARC (ug/m³)	
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 PM_{10} , 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.

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.

ERM-South, Inc.

2700 Blair Stone Road Suite C Tallahassee, Florida 32301 Mail Address: P.O. Box 7499 Tallahassee, Florida 32314 (904) 656-9700 (904) 656-9752 (fax)



9501 Princess Palm Avenue Suite 100 Tampa, Florida 33619-8319 (813) 622-8727 (813) 621-8504 (fax)

5805 Blue Lagoon Drive Suite 350 Miami, Florida 33126-2063 (305) 267-6667 (305) 267-1117 (fax)

1901 S. Congress Avenue Suite 480 Boynton Beach, Florida 33426-6556 (561) 736-4648 (561) 735-7793 (fax)

A member of the Environmental Resources Management Group Mr. C.H. Fancy, P.E. May 8, 1997 Page 2

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 used 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 preluded 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.

Sincerel

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

Re: Gulf Coast Recycling, Tampa, FL

Gulf Coast Recycling, Tampa, FL
After-the-Fact Air Construction Permit Application
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The property of the

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2700 Blair Stone Road Suite C

Tallahassee, Florida 32301 Mail Address:

P.O. Box 7499

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Mr. C.H. Fancy, P.E. May 8, 1997 Page 2

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

CONCLUSION

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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 preluded the need for a PSD review. It is not clear to me why they thought an air construction permit was not needed.

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Sincerel

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, INCLUDIN	ng cover page: 16
FROM:	JOHN REYWOLDS	
	DIVISION OF AIR RESOURCES	S MANAGEMENT
COMME	NTS: WE WOULD LIKE TO A	AVE YOUR COMMENTS ON RESOLVING THE
		ISSUE AS PROPOSED IN THE ATTACHED DRAFT
-		A OPPOSES THIS APPROACH, WE WILL ISSUE
	· ·	D. SINCE GULF COAST HAS AGREED TO
	,	
INSTI	THE EQUI	IPMENT THAT WOULD BE REQUIRED BY
146	PERMIT, WE THOUGHT TI	THE MATTER MIGHT BE BEST RESOLVED
IHRO	POUSH AN AMENDMENT TO	THE CONSENT ORDER . (COPY OF THE
CONUS	SENT ORDER AND YOUR	6-19-91 LETTER ATTACHED).
PHONE:	:	FAX NUMBER: 904/922-6979
	ere are any problems with bove phone number.	this fax transmittal, please call

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



Department of Environmental Protection

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

Virginia B. Wetherell Secretary

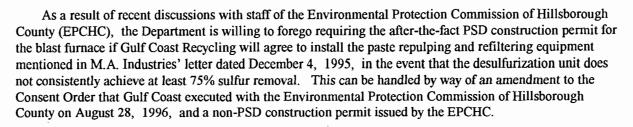
May 6, 1997

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:



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"

|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
Repulo 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.



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Environmental Protection



Lawton Chiles Governor

1997

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

Virginia B. Wetherell Secretary

FAX TRANSMITTAL SHEET

TO: _) I EVE	SMAUNDO	(1)		
DATE:	4-21		PHONE: _	656-9752	
TOTAL	NUMBER OF PA	GES, INCLUDING	COVER PAGE:	3	
FROM:	JOHN	REYNOLD	5		
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the above phone number.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E. ATLANTA, GEORGIA 30365

MEMORANDUM

JUN 19 1991

DATE:

PSD Determination of Gulf Coast Recycling, Inc. SUBJECT:

Brian L. Beals, Chief FROM:

Source Evaluation Unit M

TO: Mark A. Armentrout, Chief

Northern Compliance Unit

This determination concerns the operations at Gulf Coast/Recycling, Inc. and is in response to your memorandum dated April 2/6, 1991. Our determinations with respect to PSD are as follows:

Gulf Coast Recycling is classified as a major stationary (1)source, as defined in CFR 51.155, therefore, when notification was made of impending construction of a new 60 (NIS 15 NOT PSD 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. MUMAGE Based on the emissions sampling data from 1979-9°, there IN CLUMING was a 43.7% increase in actual SO2 emissions from the 1979, 25

pre-construction to post-construction periods. From 1979-84, actual S02 emissions averaged 208.7 pounds per hour. After completion of the 60 ton blast furnace, actual 502 emissions from 1385-90 averaged 300.0 pounds per hour. Based on Gulf Coast's annual operating level of 7800 hours

per year, the actual membersions 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 (300× 7800)/2000

pollutant.

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.

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

on the next page

6 year aumac

Hand written Kotes

Steve Smullwood

12 640 no por mas found

Nom the

2087 7300

86/26/91

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If the moximum allowable 502 emissims for

the facility are limited to no more than

1430 THY (1390.5-2-39.5), there is no significant

net increase, and no BRIT required. In the

Application Guit Coast Recyling requested that their noursel

uponation be limited to 7629 puncou (7629×374/200) = (426.6 py)

- (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.
- 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 par 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.

Figurficant Net Increase for PSD is the

facility's annual allowable (potential) minus

the facility's "actual" emission (the auriage of

the actual annual emission for the two years

prior to a particular date, or another 2 year period

that is more representiae of the normal operation

of the source. In this ease, as described in

the application, all of the 502 emissions data

the application, all of the soc emissions for the

prior to 1983 is know to underestimate the

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actual emission. "Actual 502 emissions for this

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TABLE 4

GULF COAST RECYCLING ANNUAL OPERATING REPORT SUMMARY

YEAR	HOUR/YR	PRODUCTION TPY	COKETPY	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							(· Y	
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	11,360
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

his 15/6, they

5-190 7711 300 1,156.7

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1398.3

299.8

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 reverbatory 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 variably on the SO2 emission rates per run

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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 propose 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:

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 4149.25

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."

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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 pew 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 bagbouses.
- (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 resonance 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.

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. LE. 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."

3

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 17-2.500, 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

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

= 91,501 lb/hr

Moisture = $[20,246 \text{ dscfm}/(1-0.0356)] \times 0.0356$

 $x 60 \min/hr x (18/385) lb/ft^3$

= 2096.5 lbs/hr

Heat in Gas Stream at 150°F

Dry Gas = $91,501 \text{ lb/hr} \times 16.82 \text{ BTU/lb}$

= 1.539 MMBTU/hr

Moisture = $2096.5 \text{ lb/hr} \times 1071.91 \text{ BTU/lb}$

= 2.247 MMBTU/hr

Total = 3.79 MMBTU/hr

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

Dry gas = 91,501 lbs/hr x 337.06 BTU/hr

= 30.841 MMBTU

Moisture = $2096.5 \text{ lb/hr} \times 1699.81 \text{ BTU/hr}.$

= 3.564 MMBTU

Heat Losses = 6.0 MMBTU/hr (estimated shell loses at approximately 15%)

Total = 40.41 MMBTU/hr

Heat Required in Afterburner.

= 40.41 - 3.79 = 36.62 MMBTU/hr

Afterburner Fuel Requirements:

Natural gas at 1050 BTU/cf

- = (36.62 MMBTU/br) / 1050 BTU/cf
- = 34,876 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
∞	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 form 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 kertle has been addressed in the afterthe-fact construction permit submitted in 1991 for refining kertle 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 */	2.60 T/hr 7.8 5,200 H/hr 7.0 Sulfo	121.04 - 3 63 4/4- 130.28 - 3 90.54 98.47 - 2 95.41 36.10 - 1 08.30	289.3 4.//mr
November 2, 1976	2.60 T/hr	37.27 33.39 23.78	284.34/
January 19, 1979	3.2 T/hr	176 172 177	(دستی سی
March 26, 1980	4.33 T/br	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	

TABLE 2

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

POLLUTANT	EXISTING EMISSIONS (TPX)	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	И
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	0.0	ഹ	0.0	7	И
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	И
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
Viryl 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

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

OLLUTANT	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/AFTERBRNER TONS/YR	PSD SIGNIFICANT EMISSION ` RATE TONS/YR	PSD REVIEW REQUIRED (YES/NO)
'articulate Aatter(TSP)	0.798	3,04	9,25*	-6.21	3.71	-5.54	25	No
'articulate Aatter(PM10)	0.798	3.04	9.25*	-6.21	3.71	-5.54	15	No
ulfurDioxide	374**	1,426.62	1,386.79	39.83	1,426.70	39.91	40	No
litrogen Dioxide	1.98	7,55	5.14	2.41	21.03	15.89	40	No
Carbon Monoxida	683.32	2,606.52	1,773.63	832.90	265.31	-1,508.31	100	No
/olatile Organic Compounds	33.1	126.26	85.91	40.35	13.00	-72.92	40	No
ead	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).

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March 28, 1997

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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. Lang G. Comlan

Larry G. Carlson, QEP

Air Pollution Compliance Specialist

LGC:slf

George Townsend, Gulf Coast Recycling, Inc. cc:

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: Dhornas, SWD Q. Carrebeck, HCEPC EPA S. Smallword, P.E. G. Reynolds, BAR

Mar 18 '97.

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ENVIRONMENTAL PROTECTION COMMISSION OF HILLSBOROUGH COUNTY

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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

Re: Consent Order No. 95-07285KW057

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.

- Installation of the Battery Recycling System w/Desulfurization Equipment - 03/31/97
- 2.) Final project report 04/15/97
- Install Afterburner 05/23/97

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

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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



BEST AVAILABLE COPY GULF COAST RECYCLING, INC.

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

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

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George Townsend

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pc: Willis M. Kitchen William B. Taylor

File:GTA4-480

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WETLANDS MANAGEMENT DIVISION TELEPHONE (813) 272-7104

MEMORANDUM

DATE:

February 26, 1997

TO:

John Glunn

FROM:

Jerry Campbell

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 SO_2 , 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	Stack Height	Stack Diameter T	Stack emperature	Stack Velocity	Allowab Pb Emiss (g/s	ions
<u>Unit</u>	<u>(M)</u>	(M)	(°K)	(M/S)	RACT	MACT.
Diant Europe	4.6		222		0.1055	0.0474
Blast Furance	46	0.92	338	15.9	0.1999	<u>0.0174</u>
Tapping	11	0.32	315	22.9	0.0077	0.0033
Charging	20	0.56	305	21.4	0.0229	0.0100
Refining Area	9	0.66	303	21.7	0.0033	0.0144
Slag Processing	8	0.36	294	14.3	0.0001	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

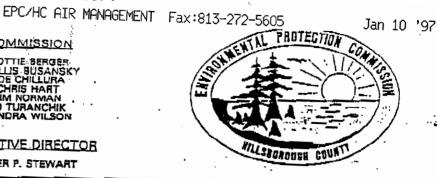
M.A. Industries

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EXECUTIVE DIRECTOR

ROGER P. STEWART



WATER MANAGEMENT DIVISION 1900 - 9TH AVENUE TAMPA, FLORIDA 33805 TELEPHONE (813)272-5980 16:44 FAX |8131272-5157

ANAGEMENT DIVISION HONE (813)272-6630 ASTE MANAGEMENT DIVISION TELEPHONE (813)272-5788

ECOSYSTEMS MANAGEMENT DIVISION TELEPHONE (813)272-7104

ENYIRONMENTAL PROTECTION COMMISSION OF HILLSBOROUGH COUNTY

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

AIR MANAGEMENT

Dear Mr. Kitchen:

BEST AVAILABLE COPY

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/ir

c: B. Thomas, SWD

J. Campbell, EPCHC

B. Beals. EPA

S. Smallwood, P.E.

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

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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 Trans Florida 33619



Program or year



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

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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

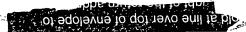
AAL/jr

c: B. Thomas, SWD

J. Campbell, EPCHC

B. Beals, EPA

S. Smallwood, P.E.



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on the reverse side?	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		I also wish to rectollowing service extra fee): 1. Addresse 2. Restricte Consult postmas	s (for an ee's Address ed Delivery
is your RETURN ADDRESS completed o	3. Article Addressed to: William N. Kitchen, Pres. Hull Coast Recycling 1901 N. 66445 St. Fleceived By: (Fint Name) 6. Signature: (Addressee or Agent) X PS Form 3811, December 1994	7. Date of De	Type ad Mail Delivery 7 2's Address (Only in	f requested
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GULF COAST RECYCLING, INC.

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

December 27, 1996

RECEIVED

JAN 02 1997

BUREAU OF AIR REGULATION

Mr. C. H. Fancy, P.E.
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Gulf Coast Recycling, Inc., PSD Application (PSD-FL-215)

Dear Mr. Fancy:

As a follow up to the November 26, 1996 teleconference, please find enclosed the manufacturer's literature on the battery recycling equipment and desulfurization process. The proposed removal efficiency of the desulfurization process is contained within. The information provided is to my knowledge the only "technical data" available from M. A. Industries and Engitec Impianti concerning sulfur removal during the battery recycling process.

The additional sulfur removal, by re-pulping the filter cake, mentioned by M. A. Industries would potentially require Gulf Coast Recycling, Inc. (GCR) to purchase a second Desulfurization process at a cost of approximately \$300,000. Our present Desulfurization process consists of two (2) twenty thousand (20,000) gallon agitated reaction tanks and forty (40) cubic feet plate and frame filter presses. This system is designed for continuous operation with once through lead oxide and lead sulfate processing. Therefore, it may not be capable of processing the input of lead oxide and lead sulfate from normal battery recycling operations and the reintroduction of processed filter cake. The two reactors and filter presses operate in parallel. When the No. 1 reactor is full and the reaction is

complete, the slurry is pumped to the no. 1 filter press. At this point input from the battery recycling operation is diverted to the No. 2 reactor and the No. 2 filter press after the reaction is complete. This rotation is completed throughout the day with each reactor being emptied or filled causing each reactor to be on-line continuously.

If the re-pulping of the filter cake could be considered advanced desulfurization, with an addition potential sulfur removal of 1/2 (one half) to one percent, the cost burden does not seem to warrant the small increase in removal efficiency.

Should you need additional information or have any questions, please contact George Townsend at (813) 626-6151.

Sincerely,

willis m. Kitchen

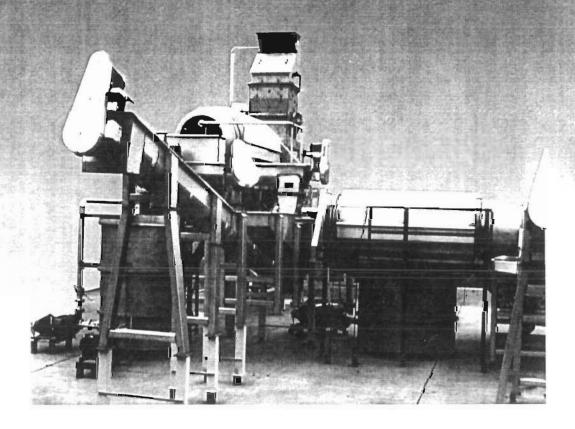
Willis M. Kitchen President,

pc: George Townsend
 William B. Taylor
 Stephen Smallwood, ERM-South
 Jerry Campbell, EPC

File:GTA4-479

Low-Cost Recovery of Valuable Lead and Plastics

Leading Edge Technology in Scrap Battery Reclamation





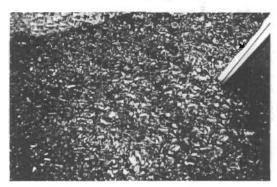
M.A. INDUSTRIES, INC.

Quality Products Through Creative Research

Capacities

Proven in Installations Around the World

M.A. Industries has expanded on their success of their popular Simple System (SS) and Complete System (CS) scrap battery processing systems and has recently developed a new line, the Desulphurization System (DS) system. In addition to the DS line of battery breakers we are also offering systems for paste desulphurization, sodium sulphate crystallization and polypropylene reclamation systems.



The DS system was developed to produce the cleanest lead paste fraction possible in order to allow for the subsequent desulphurization of the paste. The DS line differs extensively from the prior SS and CS lines. The CS's

▲ Metallic Lead

oxide classification conveyors have been replaced by rotary screens in order to achieve a better separation between products, in addition the DS system has done away with

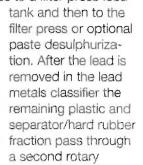


the need to use oxide removal classifiers. After the battery is broken in the hammermill all of the material is screw conveyed to the primary rotary screen where virtually all of the paste is removed. The paste then is trans-

▲ Separator/Hard Rubber

ported to the elutriator where it is held in suspension allowing only the very fine metallic lead to sink to the bottom where it is conveyed to the lead metals classifier. From the elutriator the paste goes to a filter press feed

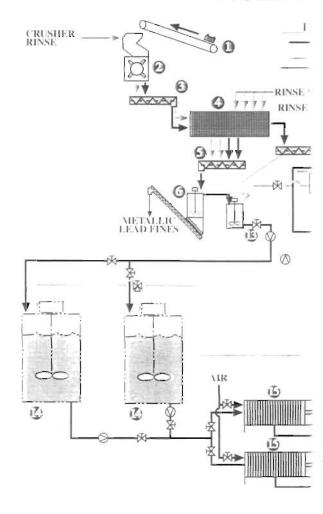
▼ Lead Paste





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Process F



Features

- Systems for small or large capacity operations
- Wet classification method
- Stainless steel for durability
- High level of automation
- » Efficient, controlled water use
- Proven success in scores of installations worldwide

Benefits

- ▶ 99%-plus lead yield
- Higher profits
- Low labor costs
- Low maintenance costs
- Low energy costs
- Reduced processing cost per ton
- Simplified environmental compliance

w Diagram Unit Description 1 Feed Conveyor GEND 2 Crusher Material Flow Liquid Flow Crusher Discharge Screw Primary Screen Unit ER FER Screen Discharge Unit Elutriator FRESH WATER 7 Crossover Feed Screw Lead Metals Classifier METALLIC LEAD RINSE WATER RINSE WATER FRESH WATER SEPARATORS OLYPROPYLENE 9 Secondary Screen Unit 10 Recirculation Tank 11 Rubber/Plastic Classifier 12 Air Conveyor Unit

screen where they are washed to remove any remaining lead before being separated in the plastics/hard rubber classifier.

Paste Desulphurization System (SRP)

M.A.'s paste desulphurization system was developed to reduce the sulphur content in the paste fraction from our DS system. The system is composed of two reactors in which one is being reacted then discharged while the second is being filled and reacted.

The process is a very simple one in which Na₂CO₃ (soda ash) is reacted with PbSO₄ (lead sulfate paste), the resulting reaction creates PbCO3 (lead carbonate) and Na₂SO₄ (sodium sulfate). After the reaction is complete the slurry is pumped to one of two plate and frame type filter presses. The resulting filter cake is approximately 10% moisture and is ready to be fed to a furnacē. The Na₂SO₄ solution can be discharged or go on to further processing to crystallize the Na₂SO₄ if local regulations prohibit discharge of such a solution.

Polypropylene **Reclamation Systems**

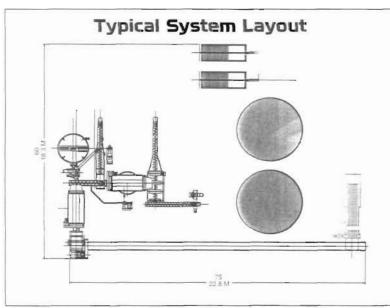
The M.A. polypropylene reclamation system was developed to add value to the polypropylene fraction obtained from our DS battery

breaker. This system incorporates intensive washing, drying, extrusion and pelletizing to produce a pellet which can go back into new battery cases or virtually any other application that a virgin polypropylene would be

used in.

▼ Polypropylene Chips





13 Surge Tank

15 Filter Press

14 Reactor Vessel

Materials and Construction

All components are made with stainless steel and special stainless steel alloys for excellent corrosion resistance. All motors are totally enclosed, fan-cooled (TEFC). Gear reduction units are of heavy duty rating. Polyethylene bearings are used where exposed to acid. Crusher feed conveyors are belt conveyors with an acid-resistant PVC belt.

All systems use state-of-the-art electronic and control devices to monitor pH and tank levels. Electrical controls are interlocked as an added safety measure and upon request the controls can be PLC controlled to automate the battery breaking and/or the desulphurization systems.

DS System Specifications					
	M.A. 21	M.A. 31	M.A. 41	M.A. 51	M.A. 61
Typical capacity, MT (tons) per hour	5.0 (5.5)	10.0 (11.0)	20.0 (22.0)	35.0 (38.6)	50.0 (55.1)
Batteries per hour	300	600	1200	2100	3000
Fresh water demand m ³ per hour*	3.5 (925)	7.0 (1850)	14.0 (3700)	24.5 (6472)	35.0 (9246)
Water pressureKg/Cm ² (PSIG)	4.22 (60)	4.22 (60)	4.22 (60)	4.22 (60)	4.22 (60)
Total connected power, Kw (hp)*	123 (165)	131 (175)	203 (272)	259 (347)	333 (447)
Labor (operating and loading), persons per shift*	2	2	2	2	2

All specifications contained in this brochure are descriptive of typical operation and do not constitute a guarantee of performance. M.A. Industries reserves the right to make modifications or changes to the processes and equipment offered at any time without notice. M.A. Industries' battery scrap process is covered by international patents.

Call Us Today

*These figures are based on our basic systems. The addition of optional pieces of equipment may change these figures. Please contact us for further information on your particular specification. M.A. Industries has a battery reclamation / classification system to suit your processing requirements. We can satisfy your objectives for capacity, cost per ton, and return on investment. You'll be surprised with the profit potential!

For further information, including current economic models for your operation, call us at (770) 487-7761 or FAX (770) 487-2710. We would like to work with you.



M.A. INDUSTRIES, INC.

Quality Products Through Creative Research

P.O. Box 2322 / 303 Dividend Drive Peachtree City, Georgia 30269

Phone (770) 487-7761 • FAX (770) 487-2710 Telex 54-2685



M. A. INDUSTRIES, INC.

Quality Products Through Creative Research

CC:WMK

LAK

December 4, 1995

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

Dear George,

As we discussed on the telephone earlier this afternoon, I have done some research and have concluded that the total sulfur content you could expect in your lead paste would be on average 1½ % by weight. This figure is based on the paste not being repulped (mixing the paste back with water to release any free sulfur and running it again through a filter press).

If the paste is repulped I would estimate that your total sulfur content would be in the range of ½ - 1 % by weight.

If I can be of any further assistance to you or answer any questions please feel free to contact me.

Best Regards,

M.A. INDUSTRIES, INC.

Engineering Division

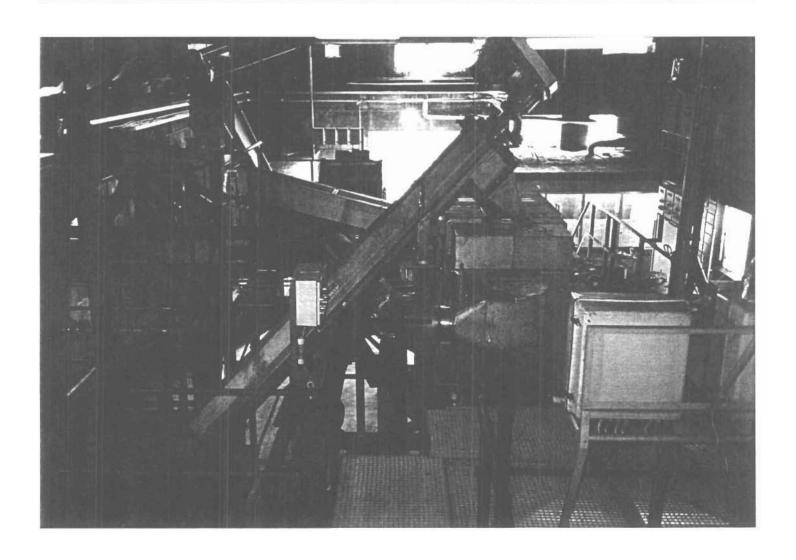
Ronald R. Egan

Marketing Manager

FAXED 4 Dec 95

CX SYSTEM PLANT

For the environmetal clean treatment of spent lead acid batteries and the recovery of battery components



Engitec Impianti S.p.A

CHARACTERISTICS OF THE CX® SYSTEM PLANT

The process for scrap battery components recovery was developed by Engitec Impianti S.p.A. using proprietary technology. The CX System process has been applied and improved in several plants in Europe, the Unites States and the Middle East since 1982.

The process can be grouped into two phases:

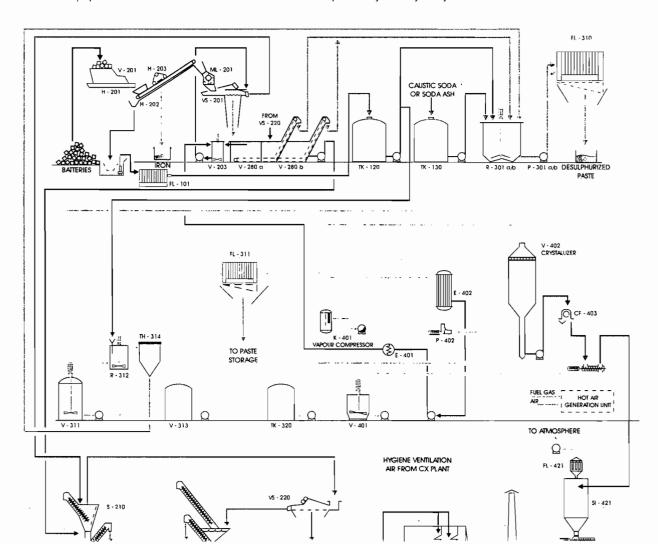
Phase one: The CX System process performs the separation of battery components.

Phase two: The CX System process desulphurizes the paste, neutralizes the electrolyte,

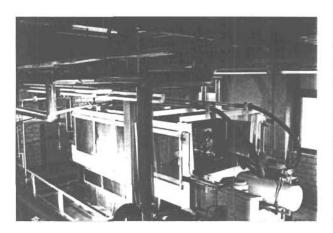
and produces detergent grade sodium sulphate.

Several distinct characteristics are associated with the CX System process:

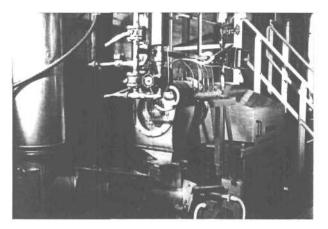
- SLI and industrial (traction) batteries processing
- · High efficiency of component recovery
- High product quality
- Transformation of sulphur contained in batteries (electrolyte and PbSQ₄) into detergent grade Na₂SQ₄ salt crystals
- · No liquid effluent no need for waste water treatment plant
- Air pollution regulations are met all dust or acid mist generating equipment is put under suction and connected to a scrubbing system
- Separate smelting of grid metal and paste hard and soft lead is obtained
- Sensible improvements in smelting of desulphurized paste
- Minimum equipment maintenance stainless steel or super alloy heavy duty construction











The batteries are loaded into the feed hopper (V-201). From the feed hopper, the batteries are conveyed to the hammer-mill (ML-201) where the components are crushed and separated. The vibroscreen (VS-201), installed under the hammermill, separates the paste and the recyrculating wash water from the oversize fragments.

The paste is then collected in a settling tank (V-280) where it is densified before being sent into the desulphurization reactors (R-301).

The oversize fragments from the vibroscreen are conveyed into the hydrodynamic separator (S-210), which separates the fragments into the following streams:

- Polypropylene
- Metallic leads (Grids and Poles)
- Ebonite and separators

The ebonite and separators are dewatered in a vibrating screen (VS-220). From the vibrating screen these components are conveyed into a second separator (S-221) that recovers polypropylene fragments from the first separation step before the ebonite and separators are collected for disposal.

The electrolyte drained from the batteries is collected, filtered, stored into a tank (TK-120). From this tank, the electrolyte is pumped into the desulphurization reactor (R-301), where it joins the densified paste to form a slurry. The paste desulphurization and the electrolyte neutralization is performed by adding NaOH or Na₂ CO₃ into the desulphurization reactor (R-301), transforming the PbSO₄ into PbO or into PbCO₃ (depending on the reagent used) and obtaining a Na₂SO₄ solution as a reaction by-product. After the reaction is complete, the paste slurry is filtered in a filter press (FL-310) to obtain desulphurized, low moisture paste that is ready for smelting or electrowinning operations. The filtered sodium sulphate solution is collected in a tank (V-311). The solution is then neutralized with electrolyte (R-312), settled (TH-314), and filtered (FL-311).

The clean solution from FL-311 is sent into the crystallization system for the production of anhydrous salt. The dry salt is stored in a silo (SI-421) ready to be sold to the detergent and/or glass industry.

The condensate water from the crystallization system is used for washing operations inside the process. All of the water used inside the process is continuously recyrculated.

INDOHINI (O)AND DYATEA

QUALITY OF THE PRODUCTS:

Metallic lead total metal content > 96% b.w. on d.b.

total metal content > 82% b.w. on d.b. Desulphurized paste

moisture < 10% b.w.

insoluble sulphur content < 0.4% b.w.

Polypropylene content on dry basis > 97% b.w.

Na₂SO₄ salt detergent grade

> Na₂SO₄ content > 99.2% moisture < 0.02% b.w.

scrubbing system

Gaseous effluents from total dust content < 5 mg/Nm³ lead content < 0.3 mg/Nm³

acid mist: absent

PYROMETALLURGICAL DESULPHURIZED PASTE SMELTING IMPROVEMENTS

- Elimination of any sulphur emissions
- Reduction of up to 70% of slag production in the furnaces resulting in a lower loss of lead
- Reduction of chemical use (less than 5% compared with 15% 20% in undesulphurized paste smelting)
- Increased productivity of furnace (approximately 25%)
- Increased lifespan of refractory (approximately 60%)
- Reduction of energy costs (approximately 25%)

SPECIFIC COMSUMPTIONS

The following average values are referred to 1 metric ton of undrained battery scrap.

Electric energy

65 kWh/t (*)

Fuel

60,000 kcal/t

Desulphurization reagent

NaOH 60 - 90 Kg/t

Na₂CO₃ 80 - 120 Kg/t (depending on the sulphur content

of batteries)

Water

Nealigible

Labor

2 operators/shift (excluding material handling)

(*) for a 20 metric ton per hour size plant

PLANT SIZE

Throughput of up to 50 metric tons/hour of undrained batteries.



Department of Environmental Protection

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

Virginia B. Wetherell Secretary

December 3, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

RE: November 26 Teleconference on Status of PSD-FL-215

Dear Mr. Kitchen:

This is intended to briefly summarize our telephone discussion last week with you, George Townsend, and Steve Smallwood regarding the innovative control technology approach for the blast furnace PSD permit.

We discussed the possibility of using an advanced desulfurization technique such as multi-stage repulping and refiltering of lead paste or another process with a design goal of about 98 percent sulfur removal. Gulf Coast Recycling expressed concern that site-specific economic factors be considered and then agreed to research available options and submit a report to the Department by January 2, 1997.

If questions arise please contact me, Al Linero or John Reynolds at (904) 488-1344.

Sincerely,

C. H. Fancy, P.E

Chief

Bureau of Air Regulation

CHF/jr

c: B. Thomas, SWD

- J. Campbell, EPCHC
- B. Beals, EPA Region IV
- S. Smallwood, P.E.

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GULF COAST RECYCLING, INC.

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

December 2, 1996



Mr. A. A. Linero, P.E.
Administrator, New Source Review Section
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Gulf Coast Recycling, Inc., PSD Application (PSD-FL-215)

Dear Mr. Linero:

Please find enclosed the a hundred eighty (180) day waiver for the above referenced permit.

Should you need additional information or have any questions, please contact George Townsend at (813) 626-6151.

Sincerely,

George Townsend

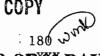
Director, Regulatory Affairs

pc: Willis M. Kitchen William B. Taylor

Jerry Campbell, EPC

File:GTA4-478

B. Thomas, SWD J. Honnington, BAR C. Carlson, Lake Eng GPA BEST AVAILABLE COPY



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

License (Permit, Certification)	Application No. PSD-FL-215
Applicant's Name:Gulf_	Coast Recycling, Inc.
With regard to the above referen	nced application, the applicant hereby with full
	f applicant's rights under Section 120.60(2) and
	ves the right to have the application approved or denied
-	ent of Environmental Protection within the 20 day time 130
	waiver is made freely and voluntarily by the applicant,
State of Floirda Department of I	at any pressure or coercion by anyone employed by the
onto of Frontal Soparmon of A	SILV II CAMMANDIA A A COCCIONA
This waiver shall expire on the_	3rd day of June 19 97
The undersigned is authorized to	make this waiver on behalf of the applicant.
	wielis m. Kitchen
	, ,
	Signature
	Willis M. Kitchen, President
	Name (Please Type or Print)
Revised December, 1995	

RECEIVED

OF CEIVED

AIR BUREAU OF REGULATION

call (813) 626-6151.

BEST AVAILABLE COPY



GULF COAST RECYCLING, INC.

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

CONFIDENTIALITY NOTE

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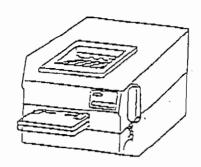
WAIVER OF DAY TIME LIMIT UNDER SECTION 120.60(2) AND 403.0876, FLORIDA STATUTES

License (Permit, Certification) Application	No. PSD-FL-215
Applicant's Name: Gulf Coast Recy	cling, Inc.
With regard to the above referenced applicat knowledge and understanding of applicant's 403.0876, Florida Statutes, waives the right	rights under Section 120,60(2) and
by the State of Florida Department of Environment of Environment of Environment of Environment of Environment of Environment	de freely and voluntarily by the applicant, re-or coercion by anyone employed by the
This waiver shall expire on the 3rd d	ay of <u>June</u> 19 97.
The undersigned is authorized to make this w	aiver on behalf of the applicant.
	wielis m. Kitchen
<u> </u>	Willis M. Kitchen, President Same (Please Type or Print)

Revised December, 1995

INDB

GCR F.1/2 FAX 813-622-8388



BATTERY TECHNOLOGIES

Recycling Division
Industrial Battery Company
Automotive Battery Division



3639 Joy Road
Columbus, CA 31906
Telephone (706) 689-0761
Fax Number (706) 689-0222

Facsimile Cover Sheet

DATE:	10/17/96	Time:/	0:15	PM	
Numbe	er of pages (Inc.	luding Cove	r Sheet):		
To:	MR JOHN	REYNOLDS			
From:	KRISTEN ST	PANGLER			
Сору:		· .	•		

Message: PLEASE CALL IF YOU NEED ANYTHING ELSE. 706 689 076/ x 258

Estimated Annual Operating Cost for Reverb Furnace Scrubber*

Δ	ssun	nnt	ion	c.
α	22071	LIVE	101	ω.

24 hr/day, 365 days/yr operation (8760 hrs)
Power cost = \$0.02/kW hr
150 lb/hr sulfur loading to the scrubber
Caustic/soda ash cost = \$0.0875/lb

Power	Cost
Power	COS

2 hp chemical feed pump	\$ 260.00
2 hp chemical feed tank agitator	260.00
32,000 cfm, 150 hp fan	19,600.00
(2) 40 hp recirculation pumps	10,500.00

Chemical Cost

150 lb/hr x 1.45 x 0.0875 x 8760 166,700.00

Repair and Maintenance, based on 3% of equipment cost

3,900.00

total \$201,400.00

DEPRECIATION @12.5% 16,250.10

*Does not include make up water usage. 2575 (TREATMENT) 3,000.00

Does not include oxidation tank nor wastewater treatment costs. 220,650.00

are proving to be very difficult to permit, especially those that accept hazardous substances. In this situation, the scrubbing system is merely a trade-off of pollutants. Air emissions are reduced while hazardous waste is increased at a cost of reduced landfill space. It is, therefore, recommended that this technology not be considered as BACT for this project.

A potential benefit from installing a dry scrubbing system is the removal of other pollutants such as acid gases. However, the final MACT standard for this industry no longer requires the control of HCl.

2.1.2 Wet Scrubbing

Conventional wet limestone scrubbing was selected over the many other wet scrubbing alternatives because it utilizes a cheap, abundant absorbent and is widely applied commercially. As of 1989, over 48 percent of all scrubbing applications in this country employed wet limestone technology. In this process, a limestone slurry solution is injected in a spray tower to absorb SO₂ and form a calcium sulfite/sulfate sludge. The advantage of this system is that, in some situations, it is capable of achieving an overall removal efficiency of more than 90 percent. The industry average for this type of control technology is more on the order of 82 percent. Some of the disadvantages are:

- 1. A wet effluent is produced that requires additional treatment with complex effluent treatment systems. For every ton of SO₂ removed, 4.25 tons of sludge are produced and, in this particular application, the sludge would likely be classified as hazardous, thereby requiring highly specialized treating, stabilizing, handling, and disposal requirements.
- 2. Economics and space requirements are not as attractive as for other alternatives.
- 3. Wet scrubbers are more prone to corrosion problems and may require expensive materials of construction.
- 4. Historically, wet scrubbers have experienced more operating problems (i.e., scaling, plugging, erosion, and corrosion) and higher maintenance requirements than the alternatives.

Economic Impact Analysis (Wet Scrubbing)

Design Parameters:

Flow Rate: 24,300 acfm

SO₂ Emission Rate: 520 lbs/hr

Temperature: 154°F

Removal Efficiency: 90%

Expected life of equipment: 10 years

Capital Investment¹:

Control Equipment² (delivered): \$ 530,100

Site Preparation/Installation³: \$ 570,000

Total: \$1,100,100

¹ Quote from Electric Controls & Service Co., Inc., Birmingham, AL

² Control equipment includes: spray dryer absorber, associated baghouse, reagent and slurry preparation and handling equipment, solids transfer and recycle equipment, fan/motor, other support equipment/instrumentation, delivery, etc.

Installation includes: engineering design, site preparation, erection, field management, startup, etc.

Annual Costs

Operating Labor and Supervision: \$ 15,000

Maintenance and Repairs: \$ 20,000

Power & Utilities: \$ 121,430

Depreciation @ 10%/yr: \$ 110,010

Disposal Cost: \$2,178,250

Total: \$ 2,444,690

Annualized SO₂ Removal Calculation

Inlet Emission Rate: 520 lbs/hr

Removal Efficiency: 90%

Total SO₂ Removed: 468 lbs/hr

Hours of Operation: 8,760 (requested)

Annual Reduction: 2,050 tons/yr

Net Annual Cost: \$ 2,444,690

Net Ann Cost/Ton SO₂ Removed: \$1,193/ton

Capital Cost: \$ 1,100,100

Capital Cost/Ton SO₂ Removed: \$537/ton

Control Technology Costing Calculations

- Cost of Wet Scrubbing Reagent (limestone)
 174 lbs/hr of limestone x \$ 75/ton ÷ 2,000 lbs/ton x 8,760 hrs/yr = \$ 57,159/yr
- Cost of Handling and Disposal of Hazardous Waste = \$250/ton
 For every ton of SO₂ removed, 4.25 tons of sludge are generated
 2,050 tons of SO₂ removed/yr x 4.25 tons of sludge generated = 8,713 tons of sludge/yr
 8,713 tons sludge/yr x \$250/ton = \$2,178,250/yr
- 3. Power Requirements for Pollution Control System Booster Fan/Motor, pump/motors, agitators, process requirements, instrumentation, etc. = 165 hp

Conversion Factor = 745.7 watts/hp 165 hp x 745.7 watts/hp ÷ 1,000 watt/kW = 123 kW/hr 123 kW/hr x \$0.045/kW x 8,760 hrs/yr = \$48,503/yr

4. Fresh Water Requirements15 gallons/min x 60 min/hr x 8,760 hrs/yr x \$ 2.00/1000 gals = \$ 15,768/yr

In addition to the above water costs, there also exists a capacity problem. Gulf Coast's current wastewater disposal permit allows for 20 gallons per minute to be discharged into the City's sewer line which runs from the facility to the main trunk line approximately 1 mile away. This rate of 20 gallons per minute is also the current maximum capacity of the line. In a letter from the City of Tampa concerning this issue (see **Appendix C**) they state that the capacity of this line is not scheduled to be increased until 1995 at the earliest.

Product Costs

Avg. annual pounds of lead

produced/sold: 49,415,000 (@ 8,760 hrs/yr)

Annual cost of scrubbing system: \$ 2,444,690

Cost per pound of lead produced: \$ 0.0495

Current price received for lead: \$ 0.30/lb

Percent of gross income from product

sales spent on scrubber system: 16.49%

The economic impact of this technology is estimated above at \$1,193/ton of SO₂

removed. Due to the relatively low throughput of this facility, it is also estimated that 16.49 percent of gross income from product sales would be spent on the scrubbing system. Based on these costs, it is recommended that this technology not be considered BACT for this particular application.

Energy Impact Analysis (Wet Scrubbing)

The total power requirements were addressed in the economic analysis, as far as determining total annual cost for the operation of the subject pollution control equipment. It has been shown that the electrical requirements will be 123 kW/hrs or 1,077,480 kWh/yr. It has been estimated that the 123 kW electrical demand, for this subject control system, would require an equivalent heat value of 471,785 Btu/hr or approximately 37.7 lbs of coal/hr at 12,500 Btu/lb. Based on these energy requirements, it is recommended that this technology not be considered BACT for this particular application.

Environmental Impact Analysis (Wet Scrubbing)

In conjunction with the additional cost for power, the incremental SO_2 increase associated with the power production phase and the solid waste disposal requirements must also be considered. To provide the 123 kW needed to operate this system, it was estimated above that 165 additional tons of coal would need to be burned at a typical power generating station in the area. Assuming a typical coal sulfur content of 1.2 percent would result in a net annual potential increase in air emissions of 7,920 lbs of SO_2/yr .

It was estimated above that approximately 8,713 tons of sludge would be generated each year. This sludge would likely be classified as hazardous and then treated, handled, and buried as such in an appropriate landfill. The country's landfills are rapidly nearing capacity and new ones are proving to be very difficult to permit, especially those that accept hazardous substances. An additional 15 gallons of wastewater per minute is also required by this technology. As stated earlier, the sewer line is already operating at capacity and it is unknown at this time when, or if, the capacity will be increased. It is, therefore, recommended that this technology not be considered as BACT for this project.

A potential benefit from installing a wet scrubbing system is the removal of other pollutants such as acid gases. However, the final MACT standard for this industry no longer requires the control of HCl.

7-5-96

COMMISSION

DOTTIE BERGER
PHYLLIS BUSANSKY
JOE CHILLURA
CHRIS HART
JIM NORMAN
ED TURANCHIK
SANDRA WILSON

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

September 5, 1996

CERTIFIED MAIL NO. Z 286 203 769

William B. Taylor, IV
MacFarlane, Ausley, Ferguson
& McMullen
P.O. Box 1531
Tampa, FL 33601

RE: Case No. 95-0728SKW057 Signed Consent Order

Dear Mr. Taylor:

Enclosed please find your client's signed copy of the Consent Order pertaining to the referenced enforcement case. Please note that the date of the Executive Director's signature is the effective date of the Order. All interim and final requirements under the Order are tracked from this date.

Paragraphs 23 and 28 of the Consent Order require submittal of two checks on or before September 19, 1996. One check in the amount of \$1,141.75 should be made payable to the Environmental Protection Commission of Hillsborough County, and another for \$6,500.00 should be made payable to the Hillsborough County Pollution Recovery Fund. The checks may be mailed to my attention at the Air Management Division, EPC, 1410 N. 21st Street, Tampa, FL 33605.

I have also enclosed a summary of the deadlines in the Consent Order for your use. If you have any questions regarding your client's responsibilities as respondent in this matter, please contact me at (813) 272-5530 for additional assistance.

An Affirmative Action - Equal Opportunity Employer

Thank you for your cooperation.

Sincerely,

Kay Strother

Kay Strother

Enforcement Coordinator Air Management Division

Enclosure

cc: Bill Thomas, FDER
Sara Fotopulos, Chief Counsel
George Townsend, Gulf Coast Recycling, Inc.

Printed on recycled paper

Gulf Coast Recycling, Inc. Case #95-0728SKW057 Summary of Consent Order Deadlines

09/15/96: Submit sprinkler system plan Report on status of S.C. #31.K. of lead RACT permit Tire wash system complete 09/19/96: Implement revised record keeping format for raw material input to blast furnace Submit check to Pollution Recovery Fund for \$6,500 Submit check to Environmental Protection Commission for \$1,141.75 Submit initial report on implementation of the 11/01/96: Project (double liner and leachate collection system for Battery Recycling Building) Complete installation and calibration of elapsed 11/15/96: time meters and continuous pressure drop measuring device Complete modifications to lead well tapping doors,

Desulfurization equipment installed (if it represents BACT)
 Complete Project (double liner and leachate collection system)

duct connection, and installation of strip curtain

04/15/97: • Final report on Project due

06/23/97: • Afterburner installed

Note: GCR is required to conduct quarterly compliance tests of the blast furnace upon authorization by the Director to operate at a process input rate of 6.5 tons per hour.

BEFORE THE ENVIRONMENTAL PROTECTION COMMISSION OF HILLSBOROUGH COUNTY

ENVIRONMENTAL PROTECTION COMMISSION OF HILLSBOROUGH COUNTY

Complainant,

vs.

Case No. 95-0728SKW057

GULF COAST RECYCLING, INC.
Respondent.

CONSENT ORDER

This Consent Order is made and entered into between the Environmental Protection Commission of Hillsborough County (Commission) and Gulf Coast Recycling, Inc. (GCR), pursuant to Chapter 84-446, Laws of Florida and interagency agreement with the Florida Department of Environmental Protection (DEP).

The Commission alleges the following:

- 1. GCR is a corporation duly authorized to conduct business in the State of Florida. GCR owns and operates a facility located at 1901 North 66th Street, Tampa, in Hillsborough County, Florida.
- 2. GCR's business activities include the operation of a secondary lead smelting facility that recycles spent automotive and industrial lead acid batteries to produce lead ingots. The secondary lead smelting facility is a source of air pollution and is subject to various DEP air pollution source permits; the New Source Performance Standards in 40 CFR 60, Subpart L; the National Emission Standards for Hazardous Air Pollutants in 40 CFR 63, Subpart X; federal and state regulations regarding the Prevention of Significant Deterioration (PSD); the lead RACT provisions of Section 62-296.600, F.A.C.; the Florida Administrative Code; and

Page 2 of 10 Consent Order Gulf Coast Recycling, Inc.

the Rules of the Commission.

- 3. From February 1994 to the present, Commission staff has received complaints from citizens living and working adjacent to the GCR facility that allege a nuisance caused by objectionable odors from the GCR facility. Commission inspectors have detected objectionable odors adjacent to the GCR facility, and based on prevailing wind direction and investigation of the surrounding area, staff believes that the source of the odor is the GCR facility. Section 1-3.22.3, Rules of the Commission, prohibits the discharge of any pollutant that causes or contributes to an objectionable odor, and Section 16 of the Act prohibits any emission that causes or reasonably may be expected to cause a nuisance.
- 4. Based on results from an annual compliance test conducted by GCR on November 1-3, 1994, GCR exceeded the maximum permitted process input rate of 4.58 tons per hour during operation of the blast furnace. Actual process input rates during testing were between 6.14 and 6.56 tons per hour, in violation of Specific Condition No. 15 of Permit No. A029-173310.
- 5. Exceedances of the National Ambient Air Quality Standard for lead of 1.5 micrograms per cubic meter were recorded at a monitor located immediately north of the GCR facility during the first two calendar quarters of 1995, and the first calendar quarter of 1996. The quarterly averages were 4.5, 2.2, and 2.8 micrograms per cubic meter, respectively. GCR's secondary lead smelting facility is the primary source of ambient lead at this location. Section 62-272.300(2), F.A.C., and Section 1-3.22.1, Rules of the Commission, prohibit the operation of a source in such a manner as to result in the release of an air pollutant into the atmosphere which causes or contributes to a violation of an ambient air quality standard.
- 6. In response to the high ambient levels of lead, Commission staff took soil samples in the vicinity of the GCR facility. Five samples exceeded by three times the average background lead concentration, and as such may indicate a significant release as defined by the Environmental Protection Agency's document entitled Guidance for Performing Site Inspections Under CERCLA: Interim Final (EPA/540-R-92-021). Four samples also exceeded the DEP's soil cleanup goals for either residential or industrial land uses.
- 7. In July 1995, Commission staff informed GCR that, based on a review of daily and monthly records of raw material input to the blast furnace, the records do not fulfill the requirements of Specific Condition No. 19 of Permit No. A029-173310.

Page 3 of 10 Consent Order Gulf Coast Recycling, Inc.

- 8. GCR met with representatives of the Commission on August 14, 1995, to discuss violations alleged in the Commission's August 1, 1995 Notice of Intent to Initiate Enforcement. GCR believes that the high ambient levels of lead recorded by the monitors adjacent to the GCR facility are caused by fugitive emissions from facility grounds. Possible corrective actions were discussed, as were the allegations regarding soil contamination, process input rate exceedances and record keeping.
- 9. On August 29, 1995, GCR submitted a letter to the DEP requesting an amendment to the PSD application for the blast furnace, reference DEP File No. 209018, PSD-FL-215. GCR subsequently submitted a revised PSD application on October 10, 1995, that included an increase in the blast furnace process input rate to 6.5 tons per hour.
- 10. On August 29 and on November 10, 1995, GCR responded to the Commission's request for information regarding corrective actions accomplished by GCR to date and GCR's proposals for additional correction. In addition to the requirements of GCR's lead RACT permit, GCR proposed the following: increased yard sweeping, additional water sprinklers, operation at the permitted process rate pending issuance of a permit or other Commission action, revision of forms to meet record keeping requirements, installation of additional controls required by future rule, and a proposal for limited soil clean up on adjacent property.
- 11. During annual compliance testing conducted on the blast furnace on December 4-6 and 8, 1995, GCR's process input rate to the blast furnace was 4.68 tons per hour, in violation of the process input rate of 4.58 tons per hour in Specific Condition No. 15 of Permit No. A029-173310.
- 12. On March 8, 1996, a representative of the U.S. Environmental Protection Agency (EPA) in conjunction with Commission staff conducted an inspection of the GCR facility. The EPA found that GCR exceeded the process input rate to the blast furnace 27 times in the seven weeks of records reviewed; GCR exceeded the process input rate for the refining kettles on February 26, 1996, and records for this process were only available for the month of February; and GCR exceeded the process rate for slag processing three times between December 28, 1995 and January 23, 1996.
- 13. Commission staff is working with DEP staff to ensure that any required corrective action to address lead contamination of soils on properties in the vicinity of GCR is included as part of a Consent Final Judgement between GCR and DEP resulting from 13th Judicial Circuit Case No. 93-7339.

Page 4 of 10 Consent Order Gulf Coast Recycling, Inc.

WHEREFORE, without admission by GCR to any of the foregoing allegations of violation and for settlement purposes only, GCR and the Commission mutually agree and it is ORDERED:

14. Upon completion of items a) through c) of this paragraph, the Director authorizes GCR to operate the blast furnace at a process input rate to the blast furnace not to exceed 6.5 tons per hour, and further conditioned as provided in paragraph 15. GCR shall maintain records to demonstrate continuous compliance with this limitation, and those records shall be available for inspection by Commission staff. When the DEP issues the PSD permit for the blast furnace, GCR shall comply with the process input rate stated therein.

On or before the deadlines stated herein, GCR shall complete the requirements in accordance with the conditions of amended permit No. AC29-258634 (Lead RACT Permit):

- a) On or before September 15, 1996, GCR shall submit a plan for the operation of the facility-wide sprinkler system which shall include, but not be limited to, a map designating the location, coverage of the sprinklers, and a schedule for their operation. The plan shall be subject to the Director's approval. The entire system shall be installed and operational within 30 days of receipt of written approval from the Director. This item shall be considered complete upon Commission staff's verification by inspection that the entire sprinkler system is installed and operational.
- b) GCR shall submit a written report to Commission staff on or before September 15, 1996, which addresses the status of the requirements in Specific Condition No. 31.K) of the Lead RACT Permit. The report shall include whether or not DEP approval has been obtained and a schedule for completing the closing and vegetation of the old stormwater pond.
- c) On or before September 15, 1996, GCR shall complete the tire wash installation required in Specific Condition No. 31.J) of the Lead RACT Permit.
- 15. The authorization in paragraph 14 is also contingent upon the following conditions and limitations:
 - a) GCR shall conduct quarterly compliance tests of the blast furnace during any period of time when the authorization is in effect. The tests shall be conducted in accordance with the

Page 5 of 10 Consent Order Gulf Coast Recycling, Inc.

current blast furnace permit (AO29-173310) and use the EPA Methods prescribed therein. The quarterly compliance tests shall test emissions of particulates, sulfur oxides, and lead, as well as opacity, and the results of each test shall be submitted to Commission staff as soon as possible, but no later than thirty days from the date of the test. Failure by GCR to comply with permitted emission limitations for the blast furnace, as demonstrated by the quarterly tests, shall result in temporary suspension of the authorization to operate at the elevated process input rate of 6.5 tons per hour, to be reinstated only upon demonstration by GCR, and approval by the Director, that the cause of the failure was immediately corrected and will not recur. Testing shall be conducted using typical raw materials.

- b) Any exceedance of the quarterly ambient air quality standard for lead in the vicinity of the facility shall result in temporary suspension of the authorization to operate at the elevated process rate of 6.5 tons per hour, to be reinstated only upon demonstration by GCR and approval by the Director that the exceedance was not caused by operation at the increased process rate of 6.5 tons per hour.
- c) Should DEP issue an Intent to Deny, or actually deny the PSD permit, then the authorization to operate at the elevated process input rate of 6.5 tons per hour is automatically revoked.
- 16. On or before November 15, 1996, GCR shall complete installation and calibration of elapsed time meters and the continuous pressure drop measuring device required in Specific Condition Nos. 41 and 43 of the Lead RACT Permit.
- 17. On or before November 15, 1996, GCR shall complete the modifications to the lead well tapping doors, the duct connection, and the installation of the strip curtain as required in Specific Condition Nos. 31.B) and C) of the Lead RACT Permit.
- 18. GCR has contracted with MA Industries, Inc. to manufacture desulfurization equipment (Equipment) to reduce sulfur dioxide emissions. This Equipment, if it complies with the DEP determination of BACT for the pollutant sulfur dioxide, shall be installed and operational by March 31, 1997. If the Equipment does not represent BACT, then GCR shall install appropriate BACT equipment on or before another date which the Executive Director and GCR feel is reasonable. GCR shall pay a penalty of \$250.00 per day for each day of delay for failure to meet this deadline, unless a force majeure event occurs as provided herein. The penalty shall

Page 6 of 10 Consent Order Gulf Coast Recycling, Inc.

be payable to the Hillsborough County Pollution Recovery Fund and shall be delivered to the Director immediately upon demand therefor.

- 19. GCR shall install an afterburner downstream of the blast furnace on or before the MACT deadline of June 23, 1997. The afterburner will be fired with natural gas and will have a set temperature of 1400 degrees. Two gas burners, one primary and one secondary, will be used to maintain the set temperature. GCR shall not seek an extension of the MACT compliance deadline of June 1997 without cause and prior approval from the Director of the Commission. Failure by GCR to meet the deadline for installation of the afterburner shall result in an agreed penalty of \$250 per day for each day of delay. The penalty shall be payable to the Hillsborough County Pollution Recovery Fund and shall be delivered to the Director immediately upon demand therefor.
- 20. GCR shall continue to use the currently existing and improved sweeper-vacuum three times a day in the production area, and three times a week in the employee parking lots, unless the area is wet from water sprinkling or rainfall.
- 21. Within fifteen (15) days of the effective date of this Consent Order, GCR shall implement the revised record keeping format for raw material input to the blast furnace previously shown to Commission staff on July 6, 1995.
- 22. GCR shall cooperate fully with the DEP regarding any required corrective actions regarding contaminated soils in the vicinity of the GCR plant.
- 23. Within fifteen (15) days of the effective date of this Consent Order, GCR shall deliver to the Director a check payable to the Hillsborough County Pollution Recovery Fund in the amount of six thousand five hundred dollars (\$6,500). This amount constitutes the cash portion of the total settlement amount of forty-two thousand five hundred dollars (\$42,500) ascribed to the above violations.
- 24. In lieu of payment of the total settlement amount of \$42,500, GCR shall implement an environmentally beneficial project (Project) intended to reduce soil and groundwater contamination from its facility, by implementing controls that go above and beyond the requirements of local, state, and federal regulations. The total cost to GCR of the Project shall be \$89,659.00, and shall consist of the installation of a double liner with leachate collection system in the floor of the new building that will house the new Battery Recycling Equipment. This liner system will consist of two

Page 7 of 10 Consent Order Gulf Coast Recycling, Inc.

layers of 40 ml or 60 ml HDPE, with HDPE drainage net between the layers. The liner system will be the same as the liner system required by the EPA for GCR's Group Pile Storage building.

- 25. GCR shall complete the Project on or before March 31, 1997, and shall submit the following initial and final reports on the Project:
 - a) The initial report shall be submitted no later than November 1, 1996, and shall provide a statement of GCR's progress to implement the Project. At a minimum, the report shall include the following: a list of equipment ordered or purchased; a description of equipment installed to date; and copies of work orders and invoices for each item completed.
 - b) The final report shall be submitted no later than April 15, 1997, and shall include the following: a certified statement, signed by an authorized representative of GCR, that the equipment and materials have been purchased and installed in accordance with the requirements of this Consent Order, and that the Project goes above and beyond the requirements of local, state, and federal regulations; and a full accounting of the costs incurred (including material costs, and fees paid to contractors for services associated with the Project).
- 26. Failure by GCR to document Project expenditures of at least \$89,659.00 shall result in an agreed penalty of one and one-half times the remaining amount (the difference between \$89,659.00 and documented expenditures). This amount shall be payable to the Hillsborough County Pollution Recovery Fund upon demand therefor.
- 27. Should GCR fail to complete the Project by the March 31, 1997 deadline, the balance of the cash penalty, thirty-six thousand dollars (\$36,000.00), shall become immediately due and payable to the Hillsborough County Pollution Recovery Fund.
- 28. Within fifteen (15) days of the effective date of this Consent Order, GCR shall deliver to the Director a check payable to the Environmental Protection Commission of Hillsborough County in the amount of one thousand one hundred forty-one dollars and seventy-five cents (\$1,141.75). This amount constitutes the reasonable expenses of the Commission for investigating and resolving the soil contamination issues related to this matter.
- 29. GCR's activities under this Consent Order shall be performed within the time limits set forth in this Consent Order unless performance is delayed by events which constitute a <u>force majeure</u>. For the purposes of this Consent Order, a <u>force majeure</u> is defined

Page 8 of 10 Consent Order Gulf Coast Recycling, Inc.

as any event arising from causes beyond the reasonable control of GCR which could not have been prevented by the exercise of due diligence. Increased costs incurred by GCR in performing any task required herein shall not be considered as constituting a force majeure event unless otherwise approved by the Director. GCR shall provide written notice of an expected delay caused by a force majeure event at least ten days prior to the deadline. The notice shall include an explanation of the steps taken by GCR to avoid the delay and a proposal for a revised schedule. Any revisions to the schedule for performance contained in this Consent Order requires written approval of the Director.

- 30. If GCR disagrees with any determination of the Director pursuant to this Consent Order, GCR may file a Notice of Appeal and an administrative hearing, pursuant to Section 9 of the Act, will be afforded. If the Director's determination is upheld by the Hearing Officer, Respondent will immediately comply with the affected provision of this Order.
- 31. The Commission, for and in consideration of the complete and timely performance by GCR of the obligations agreed to in this Consent Order, hereby waives its right to seek judicial imposition of damages or civil penalties against GCR for incidents described in this Order. GCR waives its right to a hearing or judicial review of the terms of this Order, except to the extent of proving compliance with this Order.
- 32. Entry into this Consent Order does not relieve GCR of the need to comply with other applicable federal, state, or local laws, regulations or ordinances. The entry of this Consent Order does not abrogate the rights of substantially affected persons who are not parties to this Consent Order.
- 33. The Commission hereby expressly reserves the right to initiate appropriate legal action to prevent or prohibit the future violation of applicable statutes, or the rules promulgated thereunder.
- 34. The terms and conditions set forth in this Consent Order may be enforced in a court of competent jurisdiction. Failure to comply with the terms of this Consent Order is a violation of Chapter 403, Florida Statutes and of Chapter 84-446, Laws of Florida.
- 35. GCR is fully aware that a violation of the terms of this Consent Order may subject GCR to judicial imposition of damages, civil penalties of up to \$10,000 per violation, criminal penalties and costs and expenses incurred in litigating this matter.

Page 9 of 10 Consent Order Gulf Coast Recycling, Inc.

36. This Consent Order will take effect upon the date of execution by the Director of the Commission and will constitute final agency action by the Commission.

date: 8-29-96

RESPONDENT by:
signature willie m. Kitchem
print WILLIS M. KITCHEN

(Corporate Seal)

CORPORATE AFFIDAVIT

I, the undersigned (name) WILLIS M. KITCHEN, (title) PRESIDENT of Respondent Gulf Coast Recycling, Inc., and residing at 1901N 66 ST 14mph, Fla. 33649, being first sworn, do affirm that I am duly authorized under the articles of incorporation and by-laws of Respondent to bind Respondent by my signature to this Consent Order and that it is my signature which first appears above on behalf of Respondent.

Affiant's signature Willis M. Kitchen
Affiant's printed name WILLIS M. KITCHEN

STATE OF_	FIULIUS	1	_					
COUNTY OF	Hillsbor	ough	_					
Before me Kitchen	this 29th				peared (
KITCHCH			as	-	ificatio	•	and	who
acknowled	ged to me	under o	ath to	be the	person	who s	igned	the
	^Affidavit				_			
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KAREN SUE YARD My Commission CC398110 Expires Aug. 07, 1998 Bonded by HAI 800-422-1555 Page 10 of 10 Consent Order Gulf Coast Recycling, Inc.

 7.44 _____

of September

Roger P. Stewart, Executive Director Environmental Protection Commission of Hillsborough County

1900 Ninth Avenue Tampa, Florida 33605 (813) 272-5960

kls/gcr.co 08/22/96



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

345 COURTLAND STREET, N.E. ATLANTA, GEORGIA 30365

SEP **室** 3 1996

RECEIVED

SEP 20 Mag

BUREAU OF AIR REGULATION

4APT-AEB

Clair H. Fancy, P.E. Chief Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, Florida 32399-2400

SUBJ: Applicability of 40 CFR Part 60, Subpart L and 40 CFR Part 63, Subpart X to a Pot Furnace at Gypsy Mining, Inc.,

(GMI), Located in Roseland, Florida

Dear Mr. Fancy:

This is to acknowledge receipt of your June 18, 1996, letter, asking for an Environmental Protection Agency (EPA) determination regarding the applicability of the referenced subparts to GMI. After reviewing the information provided in your letter, we have determined that the pot furnace at GMI is neither subject to New Source Performance Standards (NSPS) Subpart L (Standards of Performance for Secondary Lead Smelters) nor 40 CFR Part 63, Subpart X (National Emission Standards for Hazardous Air Pollutants From Secondary Lead Smelters) if the furnace is used exclusively for melting scrap lead that is recast but not further processed.

According to your letter, GMI operates two pot furnaces with a maximum charging capacity of 4000 lbs and 500 lbs, respectively. A permit was issued to GMI by the Florida Department of Environmental Protection (FDEP), subjecting the larger of the two pot furnaces to the provisions of Subpart L. In a June 6, 1996, letter, the company contends that this facility was originally permitted incorrectly, subjecting the pot furnace to NSPS Subpart L. Additionally, GMI believes that it is also not subject to 40 CFR Part 63, Subpart X.

The basis for GMI's conclusion that the source is not subject to Subpart L is that: a) it does not recycle or use in any way the lead from batteries, since batteries are not accepted at this facility; b) the facility purchases only pure metallic lead scrap from scrap metal yards; c) the origin of the scrap lead is from roof flashing, cable strips from telephone cables, surplus navy lead bricks, etc.; and d) the pot furnace is used only for remelting lead (heated to a maximum temperature of 1000 °F) and not smelting.

The intent of the Subpart L is to regulate emissions from secondary lead smelting facilities that include pot furnaces of more than 550 lbs charging capacity, blast (cupola) furnaces, and reverberatory furnaces. Therefore, we concur with the company's conclusion that the pot furnace at GMI is not subject to Subpart L, since it only remelts pure metallic lead scrap and is physically not set up for smelting. Additionally, we also concur with GMI's conclusion that the facility is not subject to 40 CFR Part 63, Subpart X, since §63.541 exempts lead smelters, lead refiners, or lead remelters. It would, however, be subject to both Subpart L and Subpart X if any alloying or refining processes are carried on in the pot.

If you have any questions regarding this letter, please contact Mr. Mirza P. Baig of my staff at (404) 347-3555, voice mail extension 4147.

Sincerely yours,

Jewell A. Harper

Chief

Air Enforcement Branch Air, Pesticides and Toxics Management Division

cc: Alan D. Zahm Orlando FDEP



GULF COAST RECYCLING, INC.

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

August 15, 1996

RECEIVED

AUG 1 9 1996

BUREAU OF
AIR REGULATION

Mr. A. A. Linero, P.E.
Administrator, New Source Review Section
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Gulf Coast Recycling, Inc., PSD Application (PSD-FL-215)

Dear Mr. Linero:

Please find enclosed the ninety day waiver for the above referenced permit.

Should you need additional information, please contact George Townsend at (813) 626-6151.

Sincerely,

George Townsend

Director, Regulatory Affairs

pc: Willis M. Kitchen

William B. Taylor

Jerry Campbell, EPC

File:GTA4-461

C: J. Reynolds, BAR B. Inomas, SWD

NPS J. Pennington, BAR L. Carlson, Lake Eng.

BEST AVAILABLE COPY

WATVER OF 90 DAY TIME I JIMIT TO SECTION 120.60(2) AND 403.0876, FLORIDA STATUTES

License (Permit, Certification) Application	PSD-FL-215 AC 29-209018
Applicant's Name: Gulf Coast Rec	ycling, Inc
and understanding of applicant's rights un Statutes, waives the right to have the application Department of Environmental Pro-	tection within the 90 day time period prescribed luntarily by the applicant, with full knowledge,
This waiver shall expire on the 5th	day of December 1996.
The undersigned is authorized to make this	s waiver on behalf of the applicant.
	Willio M. Kutchen
	Signature
•	WILLIS M. KITCHEN
	Name (Please Type or Print)
Revised December, 1995	



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

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



Department of Environmental Protection

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

Virginia B. Wetherell Secretary

July 25, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Re: Request for PSD Permit Processing as Innovative Control Technology

Dear Mr. Kitchen:

Today we received your July 22 letter requesting that the Department process your current PSD permit application (PSD-FL-215) under the provisions of Rule 212.400(3)(f)4., Florida Administrative Code. For reasons explained below, we do not believe that this rule will apply as you have described.

The innovative control technology rule provides for a temporary exclusion from increment consumption where a source's construction or modification would cause an exceedance of the maximum allowable increase in the ambient air concentration of a pollutant. This situation does not apply here because the innovative control technology must be a technology that has not been adequately demonstrated in practice. It must have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice, or comparable reduction at lower cost or energy consumption. These requirements are spelled out in 40 CFR 52.21(b)(19). The desulfurization process does not qualify as an innovative technology since it has been adequately demonstrated in practice and is not capable of achieving greater emissions reduction than any control system in current practice, such as a scrubber. Even a conventional scrubber would not qualify as innovative control technology since it has been adequately demonstrated.

The Department does not agree with your statement that BACT has been determined to be a minimum of 75% reduction of the SO₂ emission rate. As we stated in our July 16 letter, the Department is now in the process of gathering the information needed for determining BACT. The Environmental Protection Commission of Hillsborough County has contributed to and will continue to comment on the Department's BACT determination. However, the Department will have the main role in this regard.

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

6/1

A. A. Linero, P.E.

Administrator

New Source Review Section

Lines 7/2,

AAL/JR

c: B. Thomas, SWD J. Campbell, EPCHC J. Harper, EPA J. Bunyak, NPS

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GULF COAST RECYCLING, INC.

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

July 22, 1996



Mr. A. A. Linero, P.E.
Administrator, New Source Review Section
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Gulf Coast Recycling, Inc., PSD Application (PSD-FL-215)

Dear Mr. Linero:

Gulf Coast Recycling, Inc. has pending before the Florida
Department of Environmental Protection a PSD Construction Permit
Application for the blast furnace operation at its Tampa
facility. The company has contracted with M. A. Industries to
manufacture equipment which will substantially reduce the sulfur
content of the blast furnace feed stock and consequently the
potential sulfur dioxide emissions from the blast furnace. As a
result of our own independent investigation, including
discussions with M. A. Industries personnel, we represent that
this technology will result in a minimum of 66% reduction in
emissions applying a potential emission rate of 520 Lbs./Hour.
Enclosed is a statement from M. A. Industries which supports this
representation.

The 66% reduction factor does not presently meet the control efficiency sought by the Hillsborough County Environmental Protection Commission for BACT. After discussions with its representative, Jerry Campbell, Gulf Coast Recycling submits this request to have the PSD Construction Permit Application processed under the innovative technology provision of rule 62.212.400(3)(f) 4. F.A.C. During the four years commencing from installation of the M. A. equipment, Gulf Coast will use its best

efforts to achieve BACT which has been determined to be a minimum of 75% reduction of the aforementioned potential sulfur dioxide emission rate. We are confident that this reduction will be achievable prior to the four year expiration date.

The emissions from the facility shall otherwise be in compliance with provisions of subsection 4.

Please process the company's PSD Construction Permit Application accordingly. Should you need additional information, please contact George Townsend at (813) 626-6151.

Sincerely,

wielis m. Kitchen

Willis M. Kitchen President

pc: William B. Taylor

Jerry Campbell, EPC

File:GTA4-459



M. A. INDUSTRIES, INC.

Quality Products Through Creative Research

July 17, 1996

JUL 22 1996

Mr. George Townsend Gulf Coast Recycling 1901 North 66th Street Tampa, FL 33619

Dear Mr. Townsend,

Gulf Coast Recycling, Inc. (GCR) is currently undergoing PSD review for the Blast Furnace Operation. In conjunction with the imposed sulfur dioxide emission reduction, M.A. Industries will provide GCR with a 41 DS Battery Recycling System with a desulphurization process.

The M.A. 41DS Battery Recycling System will substantially reduce the sulfur content of the blast furnace feed stock. The desulfurization process will, at a minimum, remove sixty-six percent (66%) of the sulfur introduced into the system thereby, reducing sulfur dioxide emissions from the blast furnace. This reduction should be achievable within ninety days of start-up using the desulfurized feed stock. As the remaining non-desulfurized materials are processed in the blast furnace and only the desulfurized material is processed, a seventy five (75%) reduction in the potential emissions should be achieved.

Sincerely,

M.A. INDUSTRIES, INC.

Engineering Division

Michael E. Stout Vice President

FAXED 1/17/96



Department of Environmental Protection

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

Virginia B. Wetherell Secretary

July 16, 1996

CERTIFIED MAIL- RETURN RECEIPT REQUESTED

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

RE: Construction Permit Application PSD-FL-215

Dear Mr. Kitchen:

We received your June 24 letter in response to our June 11 letter requesting the additional information needed to complete the referenced application. The response appears to be a restatement of Gulf Coast Recycling's position set forth in your March 15 letter. We were unable to find anything new in it except for your request that the Department process the permit based on the information submitted to date.

In view of the history of this application, we will attempt to do this by completing the research and data gathering ourselves without requesting anything further from Gulf Coast. However, please be aware that the application will not be deemed complete until we have the needed information in hand. At that time we will notify you that the application is complete and that the permit processing clock has started.

In the meantime, if questions arise you may contact me or John Reynolds at (904) 488-1344.

Sincerely,

Administrator

A. A. Linero, P.E.

New Source Review Section

AAL/JR

c: B. Thomas, SWD

- L. Deken, EPCHC
- J. Harper, EPA
- J. Bunyak, NPS
- S. Smallwood, ERM-South

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GULF COAST RECYCLING, INC.

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

June 24, 1996

RECEIVED

JUN 27 1996

A. A. Linero, P.E., Administrator New Source Review Section Florida Dept. of Environmental Protection 2600 Blair Stone Road Tallahassee, Florida 32399-2400 BUREAU OF AIR REGULATION

RE: Construction Permit Application (PSD-FL-215)

Dear Mr. Linero:

As a follow-up to our meeting on March 28, 1996, and your letter dated June 11, 1996, we are submitting our responses and positions to the issues in your letter dated February 8, 1996.

- 1) The availability of SO2 emission data from other facilities prior to the installation of desulfurization is extremely limited. Each facility utilizes unique configurations in their use of furnace technology, exhaust routing schemes, and additional control technology. Many facilities were built with desulfurization initially, others co-mingle all process emissions (from all furnaces, refining kettles, etc.) through one stack, and still others also employ scrubbers. Each of these scenarios makes the requested data virtually unavailable. Additional economic analysis data has been submitted to Hillsborough County and Gulf Coast believes their concerns regarding the use of desulfurization for SO2 reductions have now been adequately addressed.
- 2) Concerning the selection of PM baseline data, a summary of Annual Operating Reports was submitted with the March 15 letter indicating which two years were chosen ass representative. The years 1983-84 were chosen because they were the two years prior to the installation of the new blast furnace. It was, and still is, Gulf Coast's position that PSD does not apply to PM since the difference between the current allowable annual emission rate of 20.4 tons per year and the baseline rate of 9.51 tons per year, which is the average of the 1983-84 data, is less than the 15 tons per year PSD threshold. However, since these two years also happen to be the two years in the summary table with the highest emissions (which would result in a higher baseline rate), they were questioned as being representative.

Gulf Coast does not feel and other consecutive two-year period would be any more representative than 1983-4. Therefore, to alleviate the representativeness concerns mentioned above, one could use the average of the six years of data prior to the

Mr. Linero June 24, 1996 Page Two

installation of the furnace (1978-84, minus 1979 due to no AOR). This average is 5.89 tons per year. The difference between the current allowable rate of 20.4 and 5.89 is 14.51 tons per year, still less than the PSD significance level of 15.0 tons per year. This supports Gulf Coast's position that PSD is not applicable to Please note that the referenced six year period includes an annual rate of 1.84 tons per year, which is clearly not representative, and that 20.4 tons per year is Gulf Coast's current permitted rate.

It remains Gulf Coast's position that by installing the proposed afterburner, which will reduce VOC emissions to below the applicable threshold, the exhaustive control technology review associated with PSD and LAER (depending on which time frame is required to be looked at due to the Tampa area being designated as attainment for ozone since the furnace installation) can be During the March 28 meeting Steve Smallwood concurred avoided. that, although the DEP is choosing at this time not to implement the recent EPA policy on the subject, it has been his experience as past Chief of the Bureau of Air Quality Management and Director of the Division of Air Resources Management, that this scenario is allowed under the current DEP air rules, and has been used by applicants many times.

Gulf Coast requests that the DEP issue the PSD permit based on the information submitted to-date. Please contact me at (813)626-6151 if you have any questions or require additional information.

Sincerely,

GULF COAST RECYCLING, INC.

willio M. Kitchem

Willis M. Kitchen President

Steve Smallwood, P.E. ERM-South, Tallahassee

CC: Q-Rennolds, BAR, C. Carlson, Cake Eng. J. Carrobell, HCEPC J. Pennington, BAR B. Thomas

DOTTIE BERGER PHYLLIS BUSANSKY JOE CHILLURA CHRIS HART JIM NORMAN : ED TURANCHIK SANDRA WILSON

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

RECEIVED

ENVIRONMENTAL PROTECTION COMMISSION OF HILLSBOROUGH COUNTY, as delegated by

THE STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL PROTECTION AIR BUREAU OF REGULATION

In the Matter of Application for Permit By:

CERTIFIED MAIL

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

DEP File No.: 0570057-003-AC

County: Hillsborough

The applicant, Gulf Coast Recycling, Inc. (GCR), applied on March 25, 1996, to the Environmental Protection Commission of Hillsborough County (EPC) for a permit to construct a soda ash (sodium carbonate) storage The soda ash would be used to make alkaline solution for treatment of residual paste from battery recycling.

The EPC as delegated by the Florida Department of Environmental Protection (FDEP) has permitting jurisdiction under Chapter 403, Florida Statutes (F.S.), and Rules 62-200 through 62-297 and 62-4, Florida Administrative Code (F.A.C.). The EPC has determined that a (construction/operating) permit is required for the proposed work.

The EPC hereby denies the permit for the following reasons:

- On March 25, 1996 an application on DEP Form No. 62-210.900(1) to construct a soda ash (sodium carbonate) silo was submitted to the EPC by GCR. This application was assigned DEP File No. 0570057-003-AC.
- 2. On page 7 of the DEP Form No. 62-210.900(1) submitted by GCR, it states, "Soda ash will be used in the desulfurization of battery recycling materials."

- 3. GCR modified their application to the FDEP in October 1995 for an after-the-fact construction permit for the existing blast furnace and this is being processed under the DEP File No. PSD-FL-215. This application addresses Prevention of Significant Deterioration covered under Rule 62-212, F.A.C. As part of the application, GCR has proposed that a desulfurization process represents the Best Available Control Technology (BACT) for the pollutant sulfur dioxide. The DEP File No. PSD-FL-215 is incomplete and no BACT determination has been made by the FDEP.
- 4. The soda ash silo is an ancillary part of the desulfurization process and authorization to construct it is tied to the FDEP's BACT determination for the blast furnace.
- 5. GCR has not provided reasonable assurance that the proposed construction will not emit pollution in contravention of the FDEP standards and applicable rules. [Rule 62-4.070, F.A.C.]

A person whose substantial interests are affected by the EPC's permit denial 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 receipt 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 EPC 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 required reversal or modification of the EPC's action or proposed 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 of Permit Denial. 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 receipt of this notice in the Legal Department at the above address of the EPC. Failure to petition within the allotted 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.

This notice constitutes final agency action unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rule 62-103.070, F.A.C. Upon timely filing of a petition or a request for an extension of time this notice will not be effective until further Order of the EPC.

Any party to this Notice of Permit Denial has the right to seek judicial review 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 Legal Department, 1900 9th Avenue, Tampa, FL 33605; and by filing a copy with the appropriate District Court of Appeal. Notice of Appeal must be filed within 30 days from the date the Notice of Permit Denial is filed with the Clerk of the EPC.

Executed in Tampa, Florida

ENVIRONMENTAL PROTECTION COMMISSION OF HILLSBOROUGH COUNTY

Roger P. Stewart Executive Director

RPS/RCK/bm

cc: Florida Department of Environmental Protection
Victor San Agustin, P.E., Environmental Engineering Consultants

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT DENIAL and all copies were mailed by certified mail before the close of business on $\frac{6/20/96}{}$ to the listed persons.

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

Clerk

COMMISSION

DOTTIE BERGER PHYLLIS BUSANSKY JOE CHILLURA CHRIS HART JIM NORMAN ED TURANCHIK SANDRA WILSON

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

RECEIVED

BUREAU OF

AIR REGULATION

June 26, 1996

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

Soda Ash Silo Re: #0570057-003-AC

Dear Mr. Kitchen:

On March 26, 1996, the Environmental Protection Commission of Hillsborough County Air Management Division received a complete application for construction of the referenced air pollution During the review process it was determined that this operation should be included in the PSD permit application currently under review by the Florida Department of Environmental Protection (DEP) in Tallahassee. Subsequently, on June 20, 1996 the referenced application was denied.

The information submitted to this office will be forwarded to DEP for inclusion in their review.

As discussed between Jerry Campbell of this office and your counsel, Bill Taylor, this application may be withdrawn and the \$250.00 application review fee refunded. The withdrawal must occur before the denial becomes final, i.e., within 14 days of the date of your receipt of the denial or before any deadline established by your requesting an extension of time to file for administrative hearing per Chapter 120 F.S.

I am available at this office at 272-5530, if you have any questions.

Sincerely,

Richard C. Kirby, IV, P.E.

Chief, Air Permitting Section

bm

/1, June 10, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Re: Construction Permit Application (PSD-FL-215)

Dear Mr. Kitchen:

On March 15, the Department received a response to our letter of February 8 requesting additional information related to the subject application. On March 28, representatives of the Department met with George Townsend of your company together with Larry Carlson of Lake Engineering, Bill Taylor, and Steve Smallwood of ERM-South.

It was agreed that Gulf Coast Recycling (GCR) would subsequently provide to the Department more concise and complete answers to our February 8 letter and also provide to the Hillsborough County Environmental Protection Commission (HCEPC) some additional details on the selection of the desulfurization system. So far, we have received a copy of the submittal to HCEPC but not the update of your March 15 letter.

This is to clarify that the permit application remains incomplete until we receive the update and that we do not have sufficient information to process it. It is important that the information requested be submitted soon. A complete permit application is required based on the 1991 EPA-approved consent order between GCR and HCEPC.

If there are any questions about what was expected based on the March 28 meeting or on anything else related to this matter, please call A. A. Linero at (904)488-1344.

Sincerely,

C. H. Fancy, Chief Bureau of Air Regulation

cc: J. Harper, EPA

- J. Bunyak, NPS
- I. Choronenko, HCEPC
- J. Campbell, HCEPC
- J. Pennington, DEP
- D. Beason, DEP



Department of Environmental Protection

Lawton Chiles Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 June 11, 1996

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

Re: Construction Permit Application (PSD-FL-215)

Dear Mr. Kitchen:

On March 15, the Department received a response to our letter of February 8 requesting additional information related to the subject application. On March 28, representatives of the Department met with George Townsend of your company together with Larry Carlson of Lake Engineering, Bill Taylor, Esq., and Steve Smallwood of ERM-South.

It was agreed that Gulf Coast Recycling (GCR) would subsequently provide to the Department more concise and complete answers to our February 8 letter and also provide to the Hillsborough County Environmental Protection Commission (HCEPC) some additional details on the selection of the desulfurization system. So far, we have received a copy of the submittal to HCEPC but not the update of your March 15 letter.

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If there are any questions about what was expected based on the March 28 meeting or on anything else related to this matter, please call Mr. A. A. Linero at (904) 488-1344.

Sincerely,

C. H. Fancy, Chief

Bureau of Air Regulation

cc: J. Harper, EPA

J. Bunyak, NPS

I. Choronenko, HCEPC

J. Campbell, HCEPC

J. Pennington, DEP

D. Beason, DEP

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GULF COAST RECYCLING, INC.

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

RECEIVED

JUN 4 1996

BUREAU OF AIR REGULATION

May 31, 1996

By Hand Delivery

Mr. Jerry Campbell, P.E. Assistant Director Hillsborough County Environmental Protection Commission Post Office Box 1101 Tampa, Florida 33605

Re: Gulf Coast Recycling, Inc., Proposed BACT for SO₂ (PSD-FL-215)

Dear Mr. Campbell:

Following are Gulf Coast's comments to your letter dated April 4, 1996 requesting additional information concerning the proposed BACT SO_2 determination for our pending PSD application.

1) After a thorough investigation of all SO_2 control technologies that are used outside the United States we have concluded that these technologies are the same or substantially similar to those that have been analyzed for this project. There are some technologies which are different than those proposed by Gulf Coast, but are not feasible for incorporation by Gulf Coast. For example, several copper smelters have installed sulfuric acid recovery plants to both control SO_2 emissions and to recover and reuse the acid. This technology is not feasible for Gulf Coast due primarily to the small amount of acid that would be present for recovery and, therefore, application of this technology would be uneconomical. Some petroleum refineries have tail gas units, or sulfur recovery units, to recover and market the sulfur content of the flue gas. This technology would not be feasible for use by Gulf Coast due to economic constraints.

No innovative technologies other than the proposed desulfurization have been identified. Desulfurization technology is the most innovative technology that is feasible for use on this project. Desulfurization provides a means of pollution prevention technology with no resulting generation of hazardous waste or other materials that require disposal. With desulfurization no pollution trade-offs exists. Desulfurization is proven technology in this industry, including a new facility in EPA Region 4 that has a design throughput capacity approximately three times that of Gulf Coast.

We examined the alternative of adding a dry scrubber to work "in series" with desulfuriztion as a means to further reduce potential SO_2 emissions. As will be explained, this alternative is uneconomical, resulting in the company being competitively disadvantaged, and would create a waste end product for disposal. Our analysis established that while the inlet SO_2 concentration would be reduced by two-thirds with this alternative, the capital and annual costs associated with the scrubber operation would make this alternative cost prohibitive. Adding a scrubber would also create hazardous wastes which would require disposal and the associated costs.

Currently 50% of the company's sales volume results from tolling of spent lead acid batteries. Under a tolling agreement, the company recycles batteries and refines the lead for a battery manufacturer at a fixed unit weight price for a one year term, regardless of the market price for lead. Since 1985 the company has not had an increase in the tolling charge for battery processing. But in fact, contractual and situational demands have forced seven decreases in the tolling charge for battery processing. During this same period operational and environmental cost have steadily increased, resulting in a net decrease in gross margin. The company will be incurring an additional \$19.00 per ton cost with the desulfurization operation. The addition of a dry scrubber for further SO₂ removal will require an additional annual operating expenditure of \$19.00 per ton. The total increased \$38.00 expenditure will erode the gross profit to a point of operational loss.

A dry scrubber will cause the expenditure of an additional \$352,481 per year or \$654.00 for every ton of SO₂ removed by the dry scrubber. The company is not able to absorb this additional recurring annual cost. It is also not able to fund the associated capital expenditure of \$645,000 for the scrubber in addition to the \$2.1 million capital costs to desulfurize the furnace feed stock.

The company must also meet its other environmental commitments to the EPA, FDEP and EPC. This includes various expenditures which are outlined in the attachment.

Below is a comparison of cost and sulfur removal efficiencies associated with the implementation of desulfurization as compared to dry scrubber technology.

	<u>Desulfurization</u>	Dry Scrubber (incremental)	<u>Total</u>
Inlet Emission Rate:	520 lbs/hr	175 lbs/hr	520 lbs/hr
Removal Efficiency:	66%	70%	90%
Total Hourly SO, Removed:	345 lbs/hr	123 lbs/hr	468 lbs/hr
Annual Reduction:	1,511 tons	539 tons	2,050 tons
Net Annual Cost:	\$472,220	\$398,935	871,155
N.A.C./Ton SO, Removed:	323/Ton	740/Ton	425/Ton
Capital Cost:	\$2,082,973	\$645,000	\$2,727,973

It is unrealistic to view a determination of BACT using financial analysis on a set minimum of cost per ton of SO, removed eg. \$1,000 a ton cost to some lower sum. Production Volume and ability to pass the increased cost must be closely viewed and put in a realistic perspective.

We hope that the above provides an adequate response to your questions. We feel that the continued viability of the Gulf Coast facility which performs an essential service in the recycling of lead outweighs the benefit received in meeting a 90% reduction level of SO₂ amounting to an approximately 123 lbs/hr decrease. balance and after considering the variables permitted in the BACT rule we are confident that your agency will favorably recommend the desulfurization as the technology of choice.

Sincerely,

GULF COAST RECYCLING, INC.

Willis M. Kitchen

President

WMK:gjw

Mr. Al Linero, Florida DEP, Tallahassee

CC: J. Reynolds, BAR C. Helladay, BAR B. Shorres, SWD

Gulf Coast Recycling - 1996 / 1997 Environmental & Capital Expenditures

·		
Battery Reclamation Equipment w/ Desulfurization	\$1,531,000.00	*
New Building for above w/ Double Liner and Leak Detection System	\$341,959.86	*
Soda Ash Silo and Feed Screws for Desulfurization Process	\$179,400.00	*
Acid Holding Tanks (2)	\$30,613.34	*
Subtotal	\$2,082,973.20	_
After Burner	\$248,000.00	
New Cooling Loops w/ Screw Conveyors	\$125,000.00	
Two Replacement Baghouses/408 Bags @ \$15.60 ea	\$24,649.60	
New Dust Transfer Screw for Hygiene Baghouse System	\$11,000.00	
New Slag Tap Enclosure and six low profile pots	\$10,000.00	
New Lead Well Ventilation Hood	\$7,500.00	
Group Pile Storage Area Wheel Washs and Pumps	\$90,000.00	*
Replacement of Roof over Work Areas	\$98,435.00	*
Group Pile Roof Replacement	\$62,480.00	*
On-Site Slurry Wall & Engineering	\$300,000.00	
Dewatering System	\$64,000.00	*
Environmental Assessment - Onsite	\$100,000.00	
Normandy Park (proposed NPL listing) Risk Assessment	\$25,000.00	
Normandy Park HRS Sampling	\$25,000.00	
Projected Sodium Hydroxide Usage @ \$385.00 Per Ton	\$351,120.00	
Projected Soda Ash Usage @ \$265.00 Per Ton	\$329,355.78	

\$184,195.44 Untreated Blast Furnace Slag per Ton Disposal Cost @ \$125.00 Disposal \$37.64 Transportation \$162.64 ======= Treated Blast Furnace Slag Disposal Cost @ \$612,296.69 \$27.00 Per Ton for reagents and \$62.50 Per Ton for disposal \$89.50 ======== Front End Loader Waldon 8500C, Wheeled Loader \$62,640.00 * Caterpillar 924F, Wheeled Loader \$98,758.00 * Caterpillar, Fork Lift \$35,000.00 *

* - Praposals In Hand

- 7

File:1996Capt \$4,947,403.71

Florida Department of Environmental Protection Meeting Sign-In Sheet

Re: Gulf Coast Date: 328 96

Name	Representing	Telephone
DIM PENNINGTON	FDEP/DARM/BAR	(904)(488-1344
AL LINERO	FDEP/DARM/BAR	(904)488-1344
Steve Smallwood	ERM- South, Talluharsa Office	(904) 656-9700
Reintagh	AHY GCR-	813 2734228
George Townsend	J 2	513-626-6151
Larry Carlson	Lake Expreening - GCL consustant	(770) 395-0464
Dannis Tober	FDEP	904-4881344
LIZ DEAKON	HILLSBOROUGH COUNTY VIA TEL	EPHONE
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INTEROFFICE MEMORANDUM

Date: 28-Mar-1996 10:34am EST

From: Alvaro Linero TAL

LINERO A

Dept: Air Resources Management

Tel No: 904/921-9532

SUNCOM: 291-9532

TO: John Reynolds TAL (REYNOLDS J)

CC: Elizabeth Deken TPA (DEKEN E @ A1 @ EPIC66)

Subject: Gulf Recycling Meeting

MEETING WITH GULF COAST RECYCLING MARCH 28, 1996

A meeting was held with Gulf Coast and its consultants and attorney to discuss the status of their PSD application which is under review by DEP in Tallahassee.

Present were: ..

Al Linero
Jim Pennington
Dennis Tober
Liz Deken (by phone)
George Townsend
Bill Taylor, Esq.
Larry Carlson
Steve Smallwood

Representing
DEP Tallahassee
DEP Tallahassee
DEP Tallahassee
Hillsborough EPC
Gulf Coast
Gulf Coast
Lake Engineering
ERM South

I (Al Linero) gave a run-down on my understanding of the history of the issue beginning with the installation of the furnace in the 80's which should have required a PSD/BACT. This was followed by a consent order with HCEPC in 1991 which incorporated EPA's requirement that a PSD review be conducted after the fact. A PSD application was submitted and has never reached completeness yet Gulf appears to have satisfied the consent order condition that they apply for a PSD permit. Time continues to go by and we still have some questions. The process has also been complicated by recent production increases which make it difficult to determine just what are the baseline dates and what exactly the project is. I mentioned that we understood nevertheless that their purpose in meeting was to discuss the SO₂ BACT technology its cost effectiveness.

Mr. Taylor asked for an explanation of how the baseline issue is related to the BACT issue. I explained that it is all part of the same PSD review process. Liz Deken stated that the main concern of

HCEPC is the BACT issue. She clarified that there is not really another expansion, but rather that the facility is running at a higher than allowable rate within its present capacity. Therefore the review can still be of the projected operating scenario compared to levels before construction of the furnace. She said HCEPC wants to get more information, but not cause the clock to be stopped and was therefore working on its own BACT proposal.

I brought up the fact that in response to the VOC control equipment issue in our letter of February 8, Gulf Coast sent us an EPA memo on federal enforceability. I pointed out that Florida has an EPA-approved SIP and is not bound by the EPA policies - particularly when they are as unclear as the one of January 22. I pointed out that even if it did apply to Florida, we must still have some kind of enforceable device which would necessarily mean a permit.

Mr. Smallwood gave his view. He believes that an industry can go ahead and install a piece of control equipment (such as the afterburner for VOC control) to get out of PSD applicability and that this is a normal practice. I pointed out that they did not really get out of PSD because they actually built the furnace and experienced the emissions which did in-fact trigger PSD. He felt that the latter issue was addressed by the penalty component in the consent order.

I mentioned that in our letter of February 8, we had asked for details of the years chosen as the baseline for particulate emissions. It turns out that the years with the highest values ever experienced were picked and it also appears that there were years before and after the furnace was installed which exhibited much lower particulate emissions. With a proposed particulate emissions rate of 20 TPY, the choice of the baseline years becomes very critical as to BACT applicability. It appears that the proposed particulate emission rate is much higher than anything ever experienced and they should consider using lower (and more representative) past actual emissions and lower proposed limits.

I suggested trying to give concise and accurate answers to our letter of February 8 instead of debating each point and opening up new ones in doing so.

The conversation shifted back to the BACT-on-SO₂ issue. Liz said that HCEPC was working on its own BACT recommendation. Mr. Smallwood and Mr. Taylor asked for clarification on who was responsible for the BACT. It was clarified that DEP remains responsible for the BACT determination. GCR will provide to HCEPC the details of why certain scrubbing options not proposed, would be cost-prohibitive. I pointed out that even the National Park Service review of the October 10, 1995 submittal noted deficiencies in the SO₂ BACT proposal although they were happier with the proposed rate than with one proposed 2 years ago by GCR.

GCR will submit more concise and complete answers to the

February 8 letter and (I expect) avoid bickering. I encouraged them to have their technical representative respond completely to inquiries from our permit review engineer, John Reynolds, and to consult with him. They will supply the BACT-on-SO₂ cost effectiveness information to our satisfaction and that of HCEPC. HCEPC will provide a recommended BACT on SO₂ to DEP. We will consider it in making our own determination.

GCR has <u>not</u> changed its sulfur removal plans (contrary to what I believed). They are mainly concerned that if HCEPC recommends or if we set a more stringent BACT, they will not be able to make any money. They said they want to make sure that such impacts are considered when determining BACT.

Although I intended to, we will not go through the consent order route to expedite the process unless the process bogs down again. The reason is that it looks as if we can't avoid conducting a PSD review because emissions after controls still trigger PSD for some pollutants. The possibility of turning it over to EPA is also an option if things don't move soon.

For reference, EPA conducted an inspection a few weeks ago and found that on several occasions the facility operated at levels in excess of their present permit (4.58 TPD). Dennis Tober accompanied that inspector which is why I asked him to come to the meeting. A consent order is (I believe) being drafted by HCEPC.

Mar 27 '96

13:18

P. 01/07

COMMISSION

DOTTIE BERGER
PHYLLIS BUSANSKY
JOE CHILLURA
CHRIS HART
JIM NORMAN
EO TURANCHIK
SANDRA WILSON

EXECUTIVE DIRECTOR

ROGER P. STEWART



ADMINISTRATIVE OFFICES, LEGAL & WATER MANAGEMENT DIVISION 1900 - 9TH AVENUE TAMPA, FLORIDA 33605 TELEPHONE (813)272-5950 FAX (813)272-5157

AIR MANAGEMENT DIVISION TELEPHONE (813)272-5530

WASTE MANAGEMENT DIVISION TELEPHONE (813)272-6788

ECOSYSTEMS MANAGEMENT DIVISION TELEPHONE (8:3)272-7104

ENVIRONMENTAL PROTECTION COMMISSION OF HILLSBOROUGH COUNTY

347-1681

FAX TRANSMITTAL SHEET

DATE:_	03-27-96
TO: Jim PERNINGTON DATEM	FERNANDO RIVER
FAX PHONE: (404)347-168 VOICE PHO	NE:
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-Enforcement	
-ENGINEERING	
-Support Operations	
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BEFORE THE ENVIRONMENTAL PROTECTION COMMISSION OF HILLSBOROUGH COUNTY

ENVIRONMENTAL PROTECTION COMMISSION OF HILLSBOROUGH COUNTY

Complainant,

vs.

Case No. 00809KLS057

GULF COAST RECYCLING, INC. Respondent.

CONSENT ORDER

This Consent Order is made and entered into between the Environmental Protection Commission of Hillsborough County ("Commission") and Gulf Coast Recycling, Inc. ("GCR"), pursuant to Chapter 84-446, Laws of Florida and interagency agreement with the Florida Department of Environmental Regulation ("DER").

The Commission alleges the following and nothing herein shall be construed to be an admission of wrong doing by GCR. This document may not be used as evidence in any proceeding, except to enforce the terms thereof.

- 1. GCR is a corporation duly authorized to conduct business in the State of Florida. GCR owns and operates a facility located at 1901 North 66th Street, Tampa, in Hillsborough County, Florida.
- 2. GCR's business activities include the recovery of lead from damaged or spent lead-acid batteries. The operation of the secondary lead blast furnace is subject to the requirements of DER Permit No. A029-173310; the New Source Performance Standards of 40 CFR 60, Subpart L; Federal and State Regulations regarding Prevention of Significant Deterioration ("PSD"); the Federal Implementation Plan ("FIP") contained in 40 CFR 52.535; the Florida Administrative Code and the Rules of the Commission. The three refining kettles are subject to the requirements of DER Permit No. A029-95365, the New Source Performance Standards, the FIP contained in 40 CFR 52.535, the Florida Administrative Code, and the Rules of the Commission.

3. On August 9, 1990, representatives of PEI Associates, Inc., the United States Environmental Protection Agency ("EPA"), and the DER inspected the GCR's facility at the aforementioned location. For a period of thirty seconds, there was an opacity of 80 percent at the blast furnace slag tap, in violation of the 5 percent opacity standard in 40 CFR 52.535(c)(1)(ii).

- 4. GCR's number 3 refining kettle was constructed without a DER construction permit. This was in violation of Section 17-2.210, F.A.C., and Section 1-3.21, Rules of the Commission. However, GCR operated the number 3 refining kettle under permit # A029-95365, issued January 28, 1985, with the approval of the Commission and the DER.
- GCR constructed a blast furnace without a DER construction Prior to the construction of the blast furnace, representatives of GCR, the Commission and DER met to determine whether or not a construction permit was going to be needed. At those meetings, joint decisions were made that the blast furnace could be constructed without a construction permit and that further testing would be needed to decide whether PSD for SC2 would be triggered. Since previous SO, test results on the old furnace were extremely varied and a single SO2 run did not cover a complete charging cycle, a testing protocol for the old furnace was agreed upon to establish a baseline for SO2. It was agreed that ten - one hour SO2 runs would be performed on the furnace and the results from the ten tests would be averaged. This testing protocol was carried out in December 1983. After a comparison of this test data and test results taken subsequently from the newer furnace, it was decided by Agency representatives that PSD was not applicable for SO2. However, subsequent to this determination, EPA has determined that a construction permit was required at the time in question and has directed the Commission staff to require GCR to submit an after-the-fact construction permit and address PSD for a number of pollutants including SO2.
- 6. GCR submitted an after-the-fact permit application, August 2, 1990, for construction of its number 3 refining kettle. Issuance of the final permit is pending.

WHEREFORE, GCR and the Commission mutually agree and it is ORDERED:

- 7. Within thirty (30) days of the effective date of this Consent Order, GCR shall submit a plan to address air emissions from the blast furnace. The plan shall describe all measures GCR has taken and intends to take to ensure compliance with all applicable opacity regulations.
- 8. Within one hundred and twenty (120) days of the effective date of this Consent Order, GCR shall submit an after-the-fact construction permit application for the blast furnace. The following items are necessary for the fulfillment of this requirement:

- A. The application shall be submitted on DER form 17-1.202(1).
- B. Pursuant to Section 17-4.05(3), F.A.C., the application shall be submitted in quadruplicate with original P.E. seals and signatures.
- C. The review fee of \$400.00, payable to the Hillsborough County Board of County Commissioners, shall be submitted with the application.
- D. GCR shall contact the DER to determine the permit review fee and shall submit same, payable to the Florida Department of Environmental Regulation, with the application.
- 9. Within fifteen (15) days of the effective date of this Consent Order, GCR shall deliver to the Director a check payable to the Pollution Recovery Fund of Hillsborough County in the amount of five thousand eight hundred dollars (\$5,800.00). This amount constitutes a reasonable settlement amount ascribed to the above violations.
- 10. Within fifteen (15) days of the effective date of this Consent Order, GCR shall deliver to the Director a check payable to the Environmental Protection Commission of Hillsborough County in the amount of one hundred forty-two dollars and fifty cents (\$142.50). This amount constitutes the reasonable expenses of the Commission for 4.75 hours at \$30 each in investigating and resolving this matter.
- 11. The Commission, for and in consideration of the complete and timely performance by GCR of the obligations agreed to in this Consent Order, hereby waives its right to seek judicial imposition of damages or civil penalties for violations outlined in this Order. GCR waives its right to a hearing or judicial review of this Order.
- 12. Entry into this Consent Order does not relieve GCR of the need to comply with other applicable federal, state, or local laws, regulations or ordinances. The entry of this Consent Order does not abrogate the rights of substantially affected persons who are not parties to this Consent Order.
- 13. The Commission hereby expressly reserves the right to initiate appropriate legal action to prevent or prohibit the future violation of applicable statutes, or the rules promulgated thereunder.
- 14. The terms and conditions set forth in this Consent Order may be enforced in a court of competent jurisdiction. Failure to comply with the terms of this Consent Order is a violation of Chapter 403, Florida Statutes and of Chapter 84-446, Laws of Florida.

GCR is fully aware that a violation of the terms of this Consent Order may subject GCR to judicial imposition of damages, civil penalties of up to \$10,000 per violation, criminal penalties and costs and expenses incurred in litigating this matter.

1.572 12 12

This Consent Order shall take effect upon the date of execution by the Director of the Commission and shall constitute final agency action by the Commission.

FOR THE RESPONDENT

willis in Bitchen Willis M. Kitchen President

AFFIDAVIT

State of Florida County of Hillsborough

Before me this day personally appeared Willis M. Kitchen, who being duly sworn, deposes and says that he, Willis M. Kitchen, as president of Gulf Coast Recycling, Inc., ("GCR") at 1901 N. 66th Street, Tampa, Florida, is the authorized representative of GCR, that he is duly authorized under the articles of incorporation and by-laws of GCR to bind GCR by his signature to this Consent Order and that it is his signature which first appears above on behalf of GCR.

Sworn to and subscribed before me this 15th day of the control of October , 1991.

Notary Public

My commission expire My COMMISSION EXPORT A 1995

RONDED THRU CEVERAL INS. UNIT

DONE AND ORDERED this 1991 in Tampa, Florida.

Roger P. Stewart, Executive Director Environmental Protection Commission

of Hillsborough County

1900 Ninth Avenue Tampa, Florida 33605

(813) 272-5960

tb/gcr.nco 09/24/91



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Johnson

REGION IV

345 COURTLAND STREET, N.E. ATLANTA, GEORGIA 30365

MEMORANDUM

JUN 19 1991

DATE:

SUBJECT: PSD Determination of Gulf Coast Recycling, Inc.

FROM: Brian L. Beals, Chief

Source Evaluation Unit M

TO: Mark A. Armentrout, Chief Northern Compliance Unit

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:

- 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 recult in a significant net emissions increase and rotential to emit increase in pollutants. Based on the emissions sampling data from 1979-9°, 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.
- (2) 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, NCx, sulfuric entire mist, and hydrogen sulfide.

- (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.
- A final concern with respect to the operations at Gulf (5)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.

Construction Permit Application for Soda Ash Silo Gulf Coast Recycling, Inc.

Prepared for:

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

Prepared by:

ENVIRONMENTAL ENGINEERING CONSULTANTS, INC.

5119 North Florida Avenue Tampa, Florida 33603 Telephone: (813) 237-3781 Telefax: (813) 238-0036

Table of Contents

1.	Completed FDEP Long Form 62-210.900(2)	Next Page
2.	Area Map	Attachment A
3.	Facility Plot Plan	Attachment B
4.	Soda Ash Silo Flow Diagram	Attachment C
5.	Precautions to Prevent Unconfined Emissions of Particulate Matter	Attachment I
6	Description of Control Equipment	Attachment F

Department of Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

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

I. APPLICATION INFORMATION

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

Identification of Facility Addressed in This Application

Enter the name of the corporation, business, governmental entity, or individual that has ownership or control of the facility; the facility site name, if any; and the facility's physical location. If known, also enter the facility identification number.

1.	Facility Owner/Company Name:		
	Gulf Coast Recycling, Inc.		
2.	Site Name:		
	Gulf Coast Recycling, Inc.	,	
3.	Facility Identification Number:		[] Unknown
	057 0057		•
4.	Facility Location:		
	Street Address or Other Locator: 1901 No	orth 66th Street	
	· · ·	Hillsborough	Zip Code: 33619
5.	Relocatable Facility?	6. Existing Pern	nitted Facility?
	[]Yes [x] No	·	[x]Yes [] No

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DEP Form No. 62-210.900(1) - Form

Effective: March 21, 1996

Application Processing Information (DEP Use)

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

Owner/Authorized Representative or Responsible Official

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

Willis M. Kitchen, President

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

Organization/Firm:

Gulf Coast Recycling, Inc.

Street Address:

1901 North 66th Street

City:

Tampa

Florida State:

Zip Code: 33619

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

Telephone: (813) 626 - 6151

Fax: (813) 622 - 8388

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.

Willio M. Kitchen

MARCH 25 1996

Signature

Attach letter of authorization if not currently on file.

Scope of Application

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

Emissions Unit ID Description of Emissions Unit		Permit Type	
01	Soda Ash Silo with Baghouse	AC1F	
		· · · · · · · · · · · · · · · · · · ·	

Purpose of Application and Category

Check one (except as otherwise indicated):

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

Th	is	Application for Air Permit is submitted to obtain:
[]	Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.
[]	Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.
		Current construction permit number:
[]	Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.
		Operation permit to be renewed:
[]	Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.
		Current construction permit number:
		Operation permit to be revised:
[.]	Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. Also check Category III.
		Operation permit to be revised/corrected:
		Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.
		Operation permit to be revised:
		Reason for revision:

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

This Application for Air Permit is submitted to obtain:
[] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.
Current operation/construction permit number(s):
[] Renewal air operation permit under Rule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.
Operation permit to be renewed:
[] Air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g., to address one or more newly constructed or modified emissions units.
Operation permit to be revised:
Reason for revision:
Category III: All Air Construction Permit Applications for All Facilities and Emissions Units
This Application for Air Permit is submitted to obtain:
[x] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).
Current operation permit number(s), if any: <u>Various existing air permits. None</u> related to this soda ash silo.
[] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.
Current operation permit number(s):
[] Air construction permit for one or more existing, but unpermitted, emissions units.

Appli	cation	Processing	Fee

Check one:			
[x] Attached - Amount: \$	250.00	[]	Not Applicable

Construction/Modification Information

1. Description of Proposed Project or Alterations:

Purpose of this application is to obtain an air construction permit to allow installation of a silo for storing soda ash. Silo has an approximate capacity of 3,600 cubic feet. A baghouse will be situated on top of the silo to control emissions during silo loading. Soda ash will be used in the desulfurization of battery recycling materials.

- 2. Projected or Actual Date of Commencement of Construction: After Construction Permit Issuance.
- 3. Projected Date of Completion of Construction: Within 30 days after commencement of construction.

Professional Engineer Certification

1. Professional Engineer Name: Victoriano L. San Agustin, Jr., PE, CHMM Registration Number: 40226 2. Professional Engineer Mailing Address: Organization/Firm: Environmental Engineering Consultants, Inc. Street Address: 5119 North Florida Avenue City: Tampa State: Florida Zip Code: 33603 3. Professional Engineer Telephone Numbers: Telephone: (813) 238 - 3311 Fax: (813) 238 - 0036

Effective: March 21, 1996

4. Professional Engineer Statement:

- I, the undersigned, hereby certify, except as particularly noted herein*, that:
- (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

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

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

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Castocan & Sm Gut, Jr. 3/19/96
imature — Date Pate

Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact:

Victor L. San Agustin, Jr., P.E., C.H.M.M. Senior Environmental Engineer

2. Application Contact Mailing Address:

Organization/Firm:

Environmental Engineering Consultants, Inc.

Street Address:

ss: 5119 North Florida Avenue

City:

Tampa

State: Florida

Zip Code: 33603

3. Application Contact Telephone Numbers:

Telephone: (813) 238 - 3311

Fax: (813) 238 - 0036

Application Comment

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1.	Facility UTM Coo Zone: 17		e: 364.048 Nort	th (km): 2093.548
2.	Facility Latitude/L Latitude (DD/MM	/SS): 18/55/51.1 Lo	ongitude (DD/MM/SS):	; ;
3.	Governmental Facility Code:	4. Facility Status Code: A	5. Facility Major Group SICCode: 33	6. Facility SIC(s): 3341
7.	Facility Comment	(limit to 500 characters	s):	
		•		
	·			

Facility Contact

1.	Name and Title of Facility Contact:	
	George Townsend, Environmental Manager	
2.	Facility Contact Mailing Address:	
(Organization/Firm: Gulf Coast Recycling, Inc.	•
	Street Address: 1901 North 66th Street	
	City: Tampa State: Florida	Zip Code: 33619
		•
3.	Facility Contact Telephone Numbers:	
	Telephone: (813) 626 - 6151 Fax: (813)	622 - 8388
	•	

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DEP Form No. 62-210.900(1) - Form

Effective: March 21, 1996

Facility Regulatory Classifications

1.	Small Business Stationar	y Source?	
	[] Yes	[x] No	[] Unknown
2.	Title V Source?		
	[x] Yes	[] No	
3.	Synthetic Non-Title V S	ource?	
	[] Yes	[x] No	
		_	·
4.	Major Source of Polluta	nts Other than Hazardo	us Air Pollutants (HAPs)?
	[x] Yes	[] No	
		- - -	·
5.	Synthetic Minor Source	of Pollutants Other tha	n HAPs?
	[] Yes	[x] No	·
		. ,	·
6.	Major Source of Hazard	lous Air Pollutants (HA	Ps)?
	[] Yes	[x] No	· ·
7.	Synthetic Minor Source	of HAPs?	
	[x] Yes	[] No	·
 ,		• •	
8.	One or More Emissions	Units Subject to NSPS	?
	[x] Yes	[] No	
9.	One or More Emission	Units Subject to NESH	AP?
	[x] Yes	[] No	
	- •		•
10	Title V Source by EPA	Designation?	· · · · · · · · · · · · · · · · · · ·
	[] Yes	[x] No	
		[]	·
11	. Facility Regulatory Cla	essifications Comment (limit to 200 characters):
* *			source, the scope of this application
	-		tory classifications are after construction
	being proposed in this		noty classifications are after construction
			<u> </u>

B. FACILITY REGULATIONS

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

N/A - Facility is a Title V Source.	

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

Although facility is a Title V source, the air source for which this construction permit is being obtained is a naturally minor source. Regulations applicable to this soda ash silo are the exemptions from Particulate RACT rules, the General Visible Emissions rule, and visible emissions testing requirements. We believe the list of regulations applying to Title V source(s) is not relevant for this application. A telephone conversation with Rick Kirby on March 15, 1996 confirms we do not have to list the regulations pertinent to a Title V source.

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification
PM (Particulate Matter)	В
:	
# . / · · · · ·	
·	
r	
:	
<u> </u>	

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D. FACILITY POLLUTANT DETAIL INFORMATION

rac	mity Fondtant Detail Information: Fondtant 1 of 1
1.	Pollutant Emitted: PM
2.	Requested Emissions Cap: N/A (lb/hour) N/A (tons/year)
3.	Basis for Emissions Cap Code: ESCRACT (Escape Particulate RACT)
4.	Facility Pollutant Comment (limit to 400 characters):
	Expected potential PM emissions are 0.21 lbs/hr and 0.07 TPY from the emissions unit covered in this application. The requested PM allowables are 2.47 lbs/hr and 0.90 TPY. We don't believe it is relevant to have to report plant-wide PM or any other plant-wide pollutant emissions for the purpose of obtaining an AC permit for this 0.9 TPY source. Mr. Rick Kirby of EPCHC agreed during a March 15, 1996 telephone conversation.
Fa	cility Pollutant Detail Information: Pollutant of
1.	Pollutant Emitted:
2.	Requested Emissions Cap: (lb/hour) (tons/year)
3.	Basis for Emissions Cap Code:
4.	Facility Pollutant Comment (limit to 400 characters):

E. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

μ.	Area Map Showing Facility Location:
	[x] Attached, Document ID: Attach. A [] Not Applicable [] Waiver Requested
2	Facility Plot Plan:
	[x] Attached, Document ID: Attach. B [] Not Applicable [] Waiver Requested
3.	Process Flow Diagram(s):
•	[x] Attached, Document ID: Attach. C [] Not Applicable [] Waiver Requested
	[A] Tallion of Boothest 12 (<u>Extractive</u> [] Theory
4	Precautions to Prevent Emissions of Unconfined Particulate Matter:
7.	[x] Attached, Document ID: Attach. D[] Not Applicable [] Waiver Requested
1	[X] Attached, Document 1D. Attach. D [] Not Applicable [] Walver Requested
-5-	Eugitive Emissions Identification:
] 3.	Fugitive Emissions Identification:
	[] Attached, Document ID: [x] Not Applicable [] Waiver Requested
	No fugitive emissions are expected from handling soda ash.
6.	Supplemental Information for Construction Permit Application:
	[] Attached, Document ID: [x] Not Applicable
	·
A A	11/2 - 1 G - 1 - (-1 Post to see to Co Coton of Local and Con Colo
Au	ditional Supplemental Requirements for Category 1 Applications Only
Au	ditional Supplemental Requirements for Category I Applications Only
	List of Proposed Exempt Activities:
7.	List of Proposed Exempt Activities: [] Attached, Document ID: [x] Not Applicable
7.	List of Proposed Exempt Activities:
7.	List of Proposed Exempt Activities: [] Attached, Document ID: [x] Not Applicable List of Equipment/Activities Regulated under Title VI:
7.	List of Proposed Exempt Activities: [] Attached, Document ID: [x] Not Applicable
7.	List of Proposed Exempt Activities: [] Attached, Document ID: [x] Not Applicable List of Equipment/Activities Regulated under Title VI: [] Attached, Document ID:
7.	List of Proposed Exempt Activities: [] Attached, Document ID: [x] Not Applicable List of Equipment/Activities Regulated under Title VI:
7.	List of Proposed Exempt Activities: [] Attached, Document ID: [x] Not Applicable List of Equipment/Activities Regulated under Title VI: [] Attached, Document ID: [] Equipment/Activities On site but Not Required to be Individually Listed
7.	List of Proposed Exempt Activities: [] Attached, Document ID: [x] Not Applicable List of Equipment/Activities Regulated under Title VI: [] Attached, Document ID:
8.	List of Proposed Exempt Activities: [] Attached, Document ID: [x] Not Applicable List of Equipment/Activities Regulated under Title VI: [] Attached, Document ID: [] Equipment/Activities On site but Not Required to be Individually Listed [x] Not Applicable
8.	List of Proposed Exempt Activities: [] Attached, Document ID: [x] Not Applicable List of Equipment/Activities Regulated under Title VI: [] Attached, Document ID: [] Equipment/Activities On site but Not Required to be Individually Listed
8.	List of Proposed Exempt Activities: [] Attached, Document ID: [x] Not Applicable List of Equipment/Activities Regulated under Title VI: [] Attached, Document ID: [] Equipment/Activities On site but Not Required to be Individually Listed [x] Not Applicable
8.	List of Proposed Exempt Activities: [] Attached, Document ID: [x] Not Applicable List of Equipment/Activities Regulated under Title VI: [] Attached, Document ID: [] Equipment/Activities On site but Not Required to be Individually Listed [x] Not Applicable Alternative Methods of Operation:
8.	List of Proposed Exempt Activities: [] Attached, Document ID: [x] Not Applicable List of Equipment/Activities Regulated under Title VI: [] Attached, Document ID: [] Equipment/Activities On site but Not Required to be Individually Listed [x] Not Applicable Alternative Methods of Operation: [] Attached, Document ID: [x] Not Applicable
8.	List of Proposed Exempt Activities: [] Attached, Document ID: [x] Not Applicable List of Equipment/Activities Regulated under Title VI: [] Attached, Document ID: [] Equipment/Activities On site but Not Required to be Individually Listed [x] Not Applicable Alternative Methods of Operation: [] Attached, Document ID: [x] Not Applicable On Alternative Modes of Operation (Emissions Trading):
8.	List of Proposed Exempt Activities: [] Attached, Document ID: [x] Not Applicable List of Equipment/Activities Regulated under Title VI: [] Attached, Document ID: [] Equipment/Activities On site but Not Required to be Individually Listed [x] Not Applicable Alternative Methods of Operation: [] Attached, Document ID: [x] Not Applicable

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11. Identification of Additional Applicable Requirements:	
[] Attached, Document ID: [x] Not Applicable	
12. Compliance Assurance Monitoring Plan:	
[] Attached, Document ID: [x] Not Applicable	
13.Risk Management Plan Verification:	
13. Kisk Wallagement Flam Vernication.	
[] Plan Submitted to Implementing Agency - Verification Attached, Document ID:	
[] Plan to be Submitted to Implementing Agency by Required Date	
[x] Not Applicable	
14. Compliance Report and Plan:	
[] Attached, Document ID: [x] Not Applicable	
15.Compliance Certification (Hard-copy Required):	
[] Attached, Document ID: [x] Not Applicable	

Emissions	Unit	Information	Section	1	of	1

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through L as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application. Some of the subsections comprising the Emissions Unit Information Section of the form are intended for regulated emissions units only. Others are intended for both regulated and unregulated emissions units. Each subsection is appropriately marked.

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

Type of Emissions Unit Addressed in This Section
1. Regulated or Unregulated Emissions Unit? Check one:
[] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
[x] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.
2. Single Process, Group of Processes, or Fugitive Only? Check one:
[x] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
[] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
[] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

Emissions Unit Information Section <u>1</u> of <u>1</u>	Emissions	Unit	Information	Section	1	of	1
---	-----------	------	-------------	---------	---	----	---

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

Emissions Unit Description and Status

1.	Description of Emissions U	Unit Addressed in This Section	(limit to 60 characters):
	-		
	Soda Ash Silo with Bagho	use	
2.		ion Number: [] No Corresp	oonding ID [x] Unknown
	AIRS Point I.D. not yet a	•	
3.	Emissions Unit Status	4. Acid Rain Unit?	5. Emissions Unit Major
	Code: A	[] Yes [x] No	Group SIC Code: 3341
_		(1: :::::::::::::::::::::::::::::::::::	5541
6.	Emissions Unit Comment	(limit to 500 characters):	
	•		
	. •		
	•		
		•	
	•		
	<u>·</u>		· ·
En	nissions Unit Control Equ	<u>ipment</u>	,
			•
A.		characters):	<u> </u>
1.	Description (limit to 200	characters).	
1	Silo baghouse for particul	late control during silo loading	
'	·		•
	•		
		a .	
2.	Control Device or Metho	d Code:	
-	010 I m		
	018 - Low Temperature 1	Habric Hilter.	

missions Unit Inforn	nation Section	of1	
. Description (limit t	o 200 characters):		
	. (
		•	
,			•
		•	
		·	
	:		
2. Control Device or	Method Code:		
•			
	200 1	<u>. </u>	
. Description (limit t	to 200 characters):	•	·
	•	•	
		· .	
		. •	
2. Control Device or	Method Code:		

Emissions Unit Information Section	1 of1	
	UNIT DETAIL INFORMATION ed Emissions Units Only)	
Emissions Unit Details		
Initial Startup Date: Approximately within 30 days after	r commencement of construction.	
Long-term Reserve Shutdown Date N/A		
	anufacturer: Cemen Tech Inc. or Equivalent odel Number: S-700 or Equivalent	
	/A MW	
5. Incinerator Information: Dwell Temperatu Dwell Time:	re: N/A o F seconds	
Emissions Unit Operating Capacity		
1. Maximum Heat Input Rate:	N/A mmBtu/hr	,
2. Maximum Incineration Rate: N	/A lb/hr N/A tons/day	
3. Maximum Process or Throughput 1 Approximate Silo Loading Rate - 4		
4. Maximum Production Rate:5. Operating Capacity Comment (lim	N/A it to 200 characters):	,
Emissions Unit Operating Schedule		
Requested Maximum Operating Sched	lule:	
	2 hours/day 7 days/week 2 weeks/yr or 728 hrs/yr	

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Emissions Unit Information Section 1	of	1	
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D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

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

Federal:	None	
State:	62-296.700(2)(c)	Exemption from Particulate RACT requirements for an emissions unit within allowable PM emissions rate less than 1 TPY. A 0.9 TPY limit is requested.
	62-296.310(2)(a)	General visible emissions limit of 20% opacity. A limit of 5% is requested in order to get exempted from annual Method 5 testing requirements.
	62-297.340(1)(d)	Annual visible emissions testing requirement.
County:	None Specific	County adopted most state air rules.

T *	TT .	Information	O 4.	4	•	4
H miccione	nit	Intormotion	SACTION	4	Λŧ	
CHAICSHILL	Omi	minor manon	Section	1	UI	1

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

Although facility is a Title V source, the emissions unit for which this construction permit is being obtained is a naturally minor source. Regulations applicable to this soda ash silo are the exemptions from Particulate RACT rules, the general visible emissions rules, and visible emissions testing requirements. We believe the list of regulations applying to Title V source(s) is not relevant for this application.

Emissions Unit Information Section ___1__ of ___1__

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

Although facility is a Title V source, the emissions unit for which this construction permit is being obtained is a naturally minor source. Regulations applicable to this soda ash silo are the exemptions from Particulate RACT rules, the general visible emissions rules, and visible emissions testing requirements. We believe the list of regulations applying to Title V source(s) is not relevant for this application.

Emissions Unit Information Section	<u> </u>	of	1
---	----------	----	---

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

Emission Point Description and Type

1.	Identification of	Point on Plot I	Plan or Flow Dia	gram:		
	See Proposed Lo	cation of Soda	Ash Silo in Atta	chment B.		
2.	Emission Point					
	[x] 1	[] 2	[] 3	[] 4		
:		·				
3.	Descriptions of l	Emissions Poin	ts Comprising thi	s Emissions Ur	nit for VE Trac	cking
	(limit to 100 cha	racters per poi	nt):	•		·
	Baghouse exhaus	st is located on	top of soda ash	silo.	; ;	
		•			+	,
					·	
					·	•
			,		•	
					•	
			• •		•	
4.	ID Numbers or	Descriptions of	f Emission Units	with this Emis	sion Point in C	common:
			•			
	I.D. number no	t yet assigned.		•		
						•
						,
5.	Discharge Type	Code:			<u>-</u>	
	[] D	[] F	[x] H	[] P		
	[] R	[] V	[] W			
_						
6.	Stack Height:				~ 44.8	feet
7	Evit Diamata	-			~ 0.3	foot
'	Exit Diameter:				~ 0.3	feet
8	Exit Temperatu	re·		Ambient	°F	
"	Dait Temperatu			MITOTOLL	. 1	

Emissions Unit Information Section 1 of 1

9. Actual Volumetric Flow Rate:	~ 500 acfm
10. Percent Water Vapor :	Ambient %
11. Maximum Dry Standard Flow Rate:	~ 500 dscfm
12. Nonstack Emission Point Height:	N/A feet
13. Emission Point UTM Coordinates: (optional)	
Zone: East (km): Nort	h (km):
14. Emission Point Comment (limit to 200 characters):	
	9

Emi	issions Unit Information Section1_	_ of <u>1</u>
		SS/FUEL) INFORMATION gulated Emissions Units)
Segn	ment Description and Rate: Segment	1 of1
	Segment Description (Process/Fuel Type a (limit to 500 characters):	and Associated Operating Method/Mode)
	Soda Ash Silo Loading	
	,	•
2.	Source Classification Code (SCC): 3 01 02122	-
3.	SCC Units: lbs/ton processed	
4.	Maximum Hourly Rate: ~ 40 TPH	5. Maximum Annual Rate: ~ 30,000 tons/yr
6.	Estimated Annual Activity Factor:	30,000 10115/91
	N/A	
7.	Maximum Percent Sulfur:	8. Maximum Percent Ash:
9.	Million Btu per SCC Unit:	N/A

N/A - - not used as fuel.

10.

Segment Comment (limit to 200 characters):

egment Description and Rate	e: Segment _	of	
Segment Description (Proce	ess/Fuel Type	and Associated Operating N	Method/Mode)
(limit to 500 characters):	N/A		,
· '			
•.			
		·	
2. Source Classification Code	(SCC): N/A		
B. SCC Units: N/A			· · · · · · · · · · · · · · · · · · ·
S. SCC Units: N/A		5. Maximum Annual Ra	ate: N/A
SCC Units: N/A Maximum Hourly Rate:	N/A		ite: N/A
S. SCC Units: N/A Maximum Hourly Rate: Estimated Annual Activity	N/A	5. Maximum Annual Ra	
6. SCC Units: N/A 6. Maximum Hourly Rate: 6. Estimated Annual Activity 7. Maximum Percent Sulfur:	N/A Factor: N N/A	5. Maximum Annual Ra	
6. SCC Units: N/A 6. Maximum Hourly Rate: 6. Estimated Annual Activity 7. Maximum Percent Sulfur: 9. Million Btu per SCC Unit:	N/A Factor: N N/A N/A	5. Maximum Annual Ra 7/A 8. Maximum Percent As	
S. SCC Units: N/A Maximum Hourly Rate: Estimated Annual Activity Maximum Percent Sulfur: Million Btu per SCC Unit:	N/A Factor: N N/A N/A	5. Maximum Annual Ra 7/A 8. Maximum Percent As	
S. SCC Units: N/A Maximum Hourly Rate: Estimated Annual Activity Maximum Percent Sulfur: Million Btu per SCC Unit:	N/A Factor: N N/A N/A	5. Maximum Annual Ra 7/A 8. Maximum Percent As	
S. SCC Units: N/A Maximum Hourly Rate: Estimated Annual Activity Maximum Percent Sulfur: Million Btu per SCC Unit:	N/A Factor: N N/A N/A	5. Maximum Annual Ra 7/A 8. Maximum Percent As	
6. SCC Units: N/A 6. Maximum Hourly Rate: 6. Estimated Annual Activity 7. Maximum Percent Sulfur: 9. Million Btu per SCC Unit:	N/A Factor: N N/A N/A	5. Maximum Annual Ra 7/A 8. Maximum Percent As	

Emissions	Unit	Information	Section	1	οf	1
CHIISSIUHS	Out	muu mauvu	Section	1	O1	T.

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

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	Pollutant Regulatory Code
PM	018	N/A	EL
	·		
	·		
-		·	
-			
-			
· -			·
	·		
	·		

28

DEP Form No. 62-210.900(1) - Form

Effective: March 21, 1996

Emissions	Unit	Information	Section	1	of	1

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

Pollutant Detail Information:

1.	Pollutant Emitted: PM					
2.	Total Percent Efficiency of Contro	l:			-	~99.9 %
3.	Potential Emissions: 0.21	lb	/hour		0.08	tons/year
	Synthetically Limited? [x] Yes [] No					-
	Range of Estimated Fugitive/Other [] 1 [] 2	[]	3	N/A 	to _	tons/year
6.	Emission Factor: 5.2 lbs PM/tor Reference: Fire Version 5 Emissions Fac	.0, So	urce Cla	assification	on Codes	and
	Emissions Method Code: [] 0 [] 1 [] 2				[x] 4	[] 5
8.	Calculation of Emissions (limit to	600 ch	aracters)):		
	5.2 lbs PM Uncontrolled/ton X	40 to	ns/hr	X (1-0.	999) =	0.21 lbs/hr
	0.21 lbs/hr X 728 hrs/yr					0.08 TPY
9.	Pollutant Potential/Estimated Emiss	ions C	ommen	t (limit to	200 cha	racters):
	A 0.9 TPY PM allowable is request RACT requirements. Similar Cemfor Gulf Coast Recycling, Inc.'s ce	en Tec	h bagho	use prev	iously per	mitted by EPCHC

Emissions Unit Information Section1 of1	
Allowable Emissions (Pollutant identified on front of page)	
A. 1. Basis for Allowable Emissions Code: ESCRACT	
2. Future Effective Date of Allowable Emissions: After permit issuance.	
3. Requested Allowable Emissions and Units: 0.9 TPY	
4. Equivalent Allowable Emissions: 2.47 lb/hour 0.9 tons/year	
5. Method of Compliance (limit to 60 characters): Annual EPA Method 9 (30 minutes)	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/N (limit to 200 characters):	Mode)
(infinit to 200 characters).	i
В.	
1. Basis for Allowable Emissions Code:	
2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:	
4. Equivalent Allowable Emissions: lb/hr tons/year	
5. Method of Compliance (limit to 60 characters):	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/) (limit to 200 characters):	Mode)

Emissions	Unit	Information	Section	1	of	1

I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

<u>Visib</u>	ele Emissions Limitation: Visible Emissions Limitation 1 of 1	
1. V	visible Emissions Subtype: VE	
2. B	Basis for Allowable Opacity: [] Rule [x] Other	
N	Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: 0 Maximum Period of Excess Opacity Allowed: N/A	% min/hour
	Method of Compliance: Annual EPA Method 9	
,F	Visible Emissions Comment (limit to 200 characters): Although state law allows 20% opacity, a 5% opacity limit is requested in exempt the facility from having to conduct an EPA Method 5 on the silo.	order to
		·
<u>Visil</u>	ble Emissions Limitation: Visible Emissions Limitation of	
1. '	Visible Emissions Subtype:	· · · · · · · · · · · · · · · · · · ·
2. 1	Basis for Allowable Opacity: [] Rule [] Other	
]]	Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: Maximum Period of Excess Opacity Allowed:	% min/hour
4.	Method of Compliance:	
5.	Visible Emissions Comment (limit to 200 characters):	

Emissions	Unit	Information	Section	1	of	1	
C11112210112	UIIII	miormation	Section	1	OI	1	

J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

(Regulated 1	Emissions Units Only)
Continuous Monitoring System: Continu	uous Monitor of
1. Parameter Code: N/A	2. Pollutant(s): N/A
3. CMS Requirement: N/A	[] Rule [] Other
4. Monitor Information: N/A Manufacturer: N/A Model Number: N/A	Serial Number: N/A
5. Installation Date: N/A	
6. Performance Specification Test Date:	N/A
7. Continuous Monitor Comment (limit t	to 200 characters): N/A
·	
Continuous Monitoring System: Continuous 1. Parameter Code: N/A	2. Pollutant(s): N/A
3. CMS Requirement: N/A	[] Rule [] Other
4. Monitor Information: N/A Manufacturer: N/A Model Number: N/A	Serial Number: N/A
5. Installation Date: N/A	
6. Performance Specification Test Date:	N/A
7. Continuous Monitor Comment (limit	to 200 characters): N/A

Emissions Unit information Section 1 of 1	Emissions	Unit Information	Section	1	of	1
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K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

(Regulated and Unregulated Emissions Units)

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

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

En	nissio	ns Unit Info	ormation Section	n <u>1</u> of	1	
2.	Incre	ement Consu	ming for Nitrog	en Dioxide? N/A	A - Soda As	sh Silo is not a NO _x Source.
	serie emis	es of question ssions unit co	ns to make a pre	liminary determin crement for nitrog	ation as to	oxides, answer the following whether or not the Check first statement, if
	[]	this applica		ergone PSD review		ng PSD review as part of y, for nitrogen dioxide. If
	[]	pursuant to Chapter 62 commenced	paragraph (c) o -213, F.A.C., a d (or will commo	f the definition of nd the emissions u	"major sou unit address after Febru	uary 8, 1988. If so, baseling
	[]	the emission	ons unit began in	itial operation after	er February	an EPA major source, and 8, 1988, but before March sions unit consumes
		-	• .	•	_	a) initial operation after d emissions unit consumes
	[nonzero.	In such case, addetermine wheth	ditional analysis, l	beyond the ssions have	of the emissions unit are scope of this application, is occurred (or will occur) rement.
3.	Inc	rement Cons PM SO2 N/A NO2 N/A	uming/Expandin [x]C []C []C	g Code: [] E [] E [] E	[]	Unknown Unknown Unknown
4	Bas	seline Emissi				
		PM	O.21	lb/hour	0.9	tons/year
		SO2 NO2	N/A	lb/hour	N/A N/A	tons/year tons/year
5	. PS		(limit to 200 ch	aracters):		
1				**		

DEP Form No. 62-210.900(1) - Form Effective: March 21, 1996

Emissions	Unit	Information	Section	1	of	1

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION (Regulated Emissions Units Only)

Supplemental Requirements for All Applications

1.	Process Flow Diagram
	[x] Attached, Document ID: Attach C.[] Not Applicable [] Waiver Requested
2.	Fuel Analysis or Specification
	[] Attached, Document ID: [x] Not Applicable [] Waiver Requested
3.	Detailed Description of Control Equipment
	[x] Attached, Document ID: Attach. E [] Not Applicable [] Waiver Requested
4.	Description of Stack Sampling Facilities
-	[] Attached, Document ID: [x] Not Applicable [] Waiver Requested
5.	Compliance Test Report
	[] Attached, Document ID:
	[] Previously submitted, Date:
	[x] Not Applicable
6.	Procedures for Startup and Shutdown
	[] Attached, Document ID: [x] Not Applicable
7.	Operation and Maintenance Plan
	[] Attached, Document ID: [x] Not Applicable
8.	Supplemental Information for Construction Permit Application
	[] Attached, Document ID: [x] Not Applicable
9.	Other Information Required by Rule or Statute
	[] Attached, Document ID: [x] Not Applicable

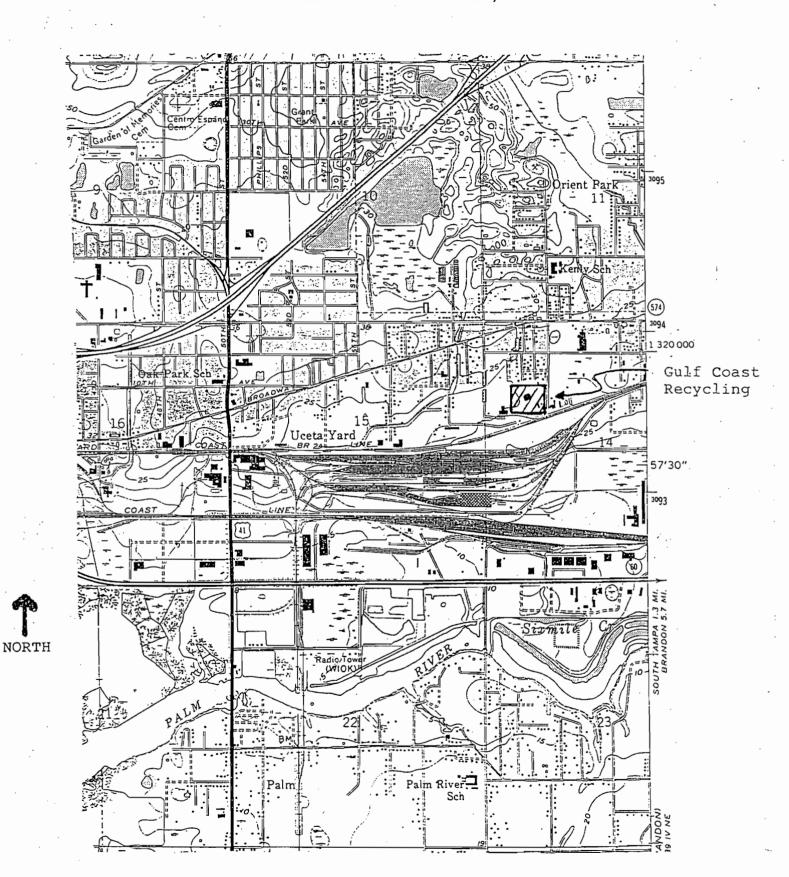
Emissions Unit Information Section 1	. of	1
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Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operation									
[] Attached, Document ID: [x] Not Applicable									
11. Alternative Modes of Operation (Emissions Trading)									
[] Attached, Document ID: [x] Not Applicable									
12. Identification of Additional Applicable Requirements									
[] Attached, Document ID: [x] Not Applicable									
13. Compliance Assurance Monitoring Plan									
[] Attached, Document ID: [x] Not Applicable									
14. Acid Rain Application (Hard-copy Required)									
[] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID:									
[] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:									
[] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:									
[] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:									
[x] Not Applicable									

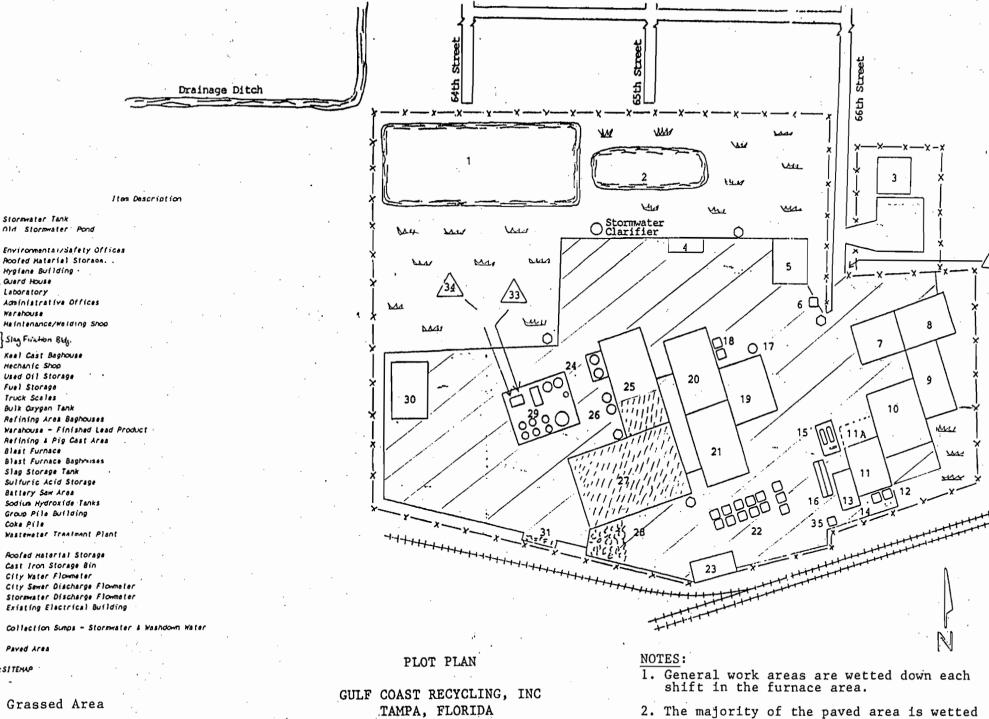
Attachment A

Area Map



Attachment B

Facility Plot Plan



Mr Grassed Area

Paved Area

File:SITEMAP

Stormenter Tank

Old Stormater Pond

Hygiana Building . Quard House Laboratory

Slag Firetion Bldg. Keel Cast Baghouse

HECHANIC Shop Used Oil Storage

Fuel Storage Truck Scales

Blest Furnace

Slag Storage Tank

Battery Saw Area

Group Pile Bullaing Coke Pile

City Water Flowmeter

Bulk Oxygen Tank

Warehouse

12.

21.

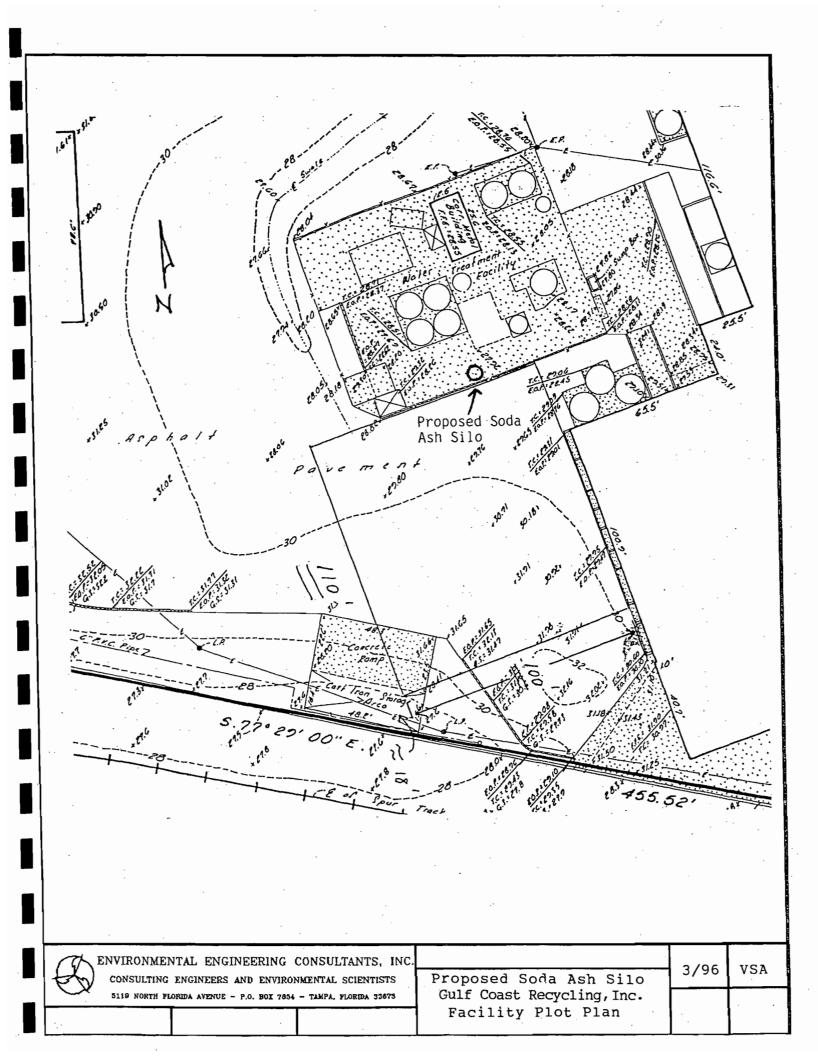
30.

31.

33.

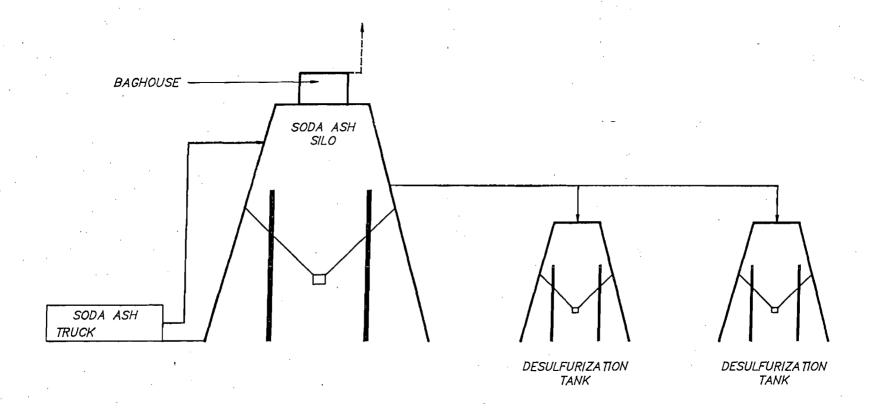
Water sprays under roof in portion of building 25 and in building 27.

by sprinklers on south fence line.



Attachment C

Soda Ash Silo Flow Diagram



DRAWING FILE #: LAST UPDATED: 03/14/96 LAST PLOTTED: 03/14/96 PLOT SCALE: 1=1

3

DESIGNED :

V.S.

ENVIRONMENTAL ENGINEERING CONSULTANTS, INC.
CONSULTING ENGINEERS AND ENVIRONMENTAL SCIENTISTS

DRAWN:

5119 NORTH FLORIDA AVENUE - P.O. BOX 7854 - TAMPA, FLORIDA 33673

CHECKED :

V.S.

PROPOSED SODA ASH SILO
GULF COAST RECYCLING, INC.

GULF COAST RECYCLING, IN

SCHEMATIC FLOW DIAGRAM
TAMPA FLORIDA

DATE: SCALE:

WAR 1990 NTS

JOB MUMBER: SHEET:

Attachment D

Precautions to Prevent Unconfined Emissions Particulate Matter

No unconfined PM emissions are expected from silo loading soda ash and screw conveying over to the desulfurization tanks. The screw conveyor is enclosed and the desulfurization tanks are covered. The soda ash will be conveyed into the desulfurization tanks at a rate that will produce no visible emissions. Reasonable precautions to minimize unconfined or fugitive PM or Pb emissions plant wide have been incorporated in the lead RACT permit applications already submitted to EPCHC.

Attachment E

Description of Control Equipment

CEMEN TECH, Inc.

1100 North 14th Street Indianola, Iowa 50125 800-247-2464 Fax: (515) 961-7409

Mike G. Kleinkort District Manager

October 25, 1995

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

RE: Proposal on S-900 CEMEN TECH Silo

Dear George:

In a concerted effort to retain your valuable business, CEMEN TECH has authorized me to offer you a seldom seen discount on the S-900 Silo in the amount of \$1,874.27. This breaks down as follows:

Original Proposed Price including 6.5% tax was \$43,054.75

Revised Proposed Price including 6.5% tax is \$41,058.65

These prices do include freight to Tampa. I sincerely hope that this will put us in a position that will allow you to retain Schwing America/CEMEN TECH as your supplier on this facet of your expansion program. A plus side to this is a common supplier for your silo's.

I am also enclosing some of our literature on the volumetric proportioning equipment we build. We can custom build proportioning equipment that can mix a multitude of components into a common mix design. Should this be of interest, we would be pleased to provide you with additional information.

Respectfully,

Mike G. Kleinkort

cc: Ed Spink Schwing America Inc.

Enclosure

CEMEN TECH, Inc.

1100 North 14th Street Indianola, Iowa 50125 800-247-2464 Fax: (515) 961-7409

Mike G. Kleinkort District Manager

October 19, 1995

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

RE: Proposal on S-900 Silo and Auger Assembly

Dear George:

It is our pleasure to provide you with the following proposal on the silo and auger assembly we discussed.

	projoul silo.	
1)	3050 cu. ft. silo	\$ <u>25,538.00</u>
	OR 3600 cu. ft. silo (std. production model)	\$25,538.00
2)	15', 6" dia. external auger assembly includes 7-1/2HP 3 phase 230/460 volt electric motor, del rate 525# per min.	\$ <u>3,673.00</u>
3)	Reverse jet pulse bag house	\$ <u>1,879.00</u>
4)	High/Low Bin indicator	\$ <u>1,470.00</u>
5)	25', 6" dia. Auger Assembly with swivel ring, center hanger, includes 10HP 3 phase 230/460 volt electric motor del. rate of 525# per minunite at 175 RPM	\$ <u>4,867.00</u>
6)	Freight to Tampa, Florida 33619	\$ 3,000.00
	Sub Total	\$40,427.00
7)	6.5% Florida Sales Tax	\$ <u>2,627.75</u>
8)	TOTAL DELIVERED PRICE	\$ <u>43,054.75</u>
addit Motor	OR STARTERS: Are not included in any of the above pricing. ional cost as follows: r Starter for 15' silo external auger 230/460 V r Starter for 25' Auger Assembly w/swivel 230V	\$749.00 \$958.00
-	" " " " " 460V	\$749.00

Page 2. Gulf Coast Recyclers, Inc. George Townsend October 19, 1995

Should you require any additional information, please don't hesitate to give us a call.

Respectfully,

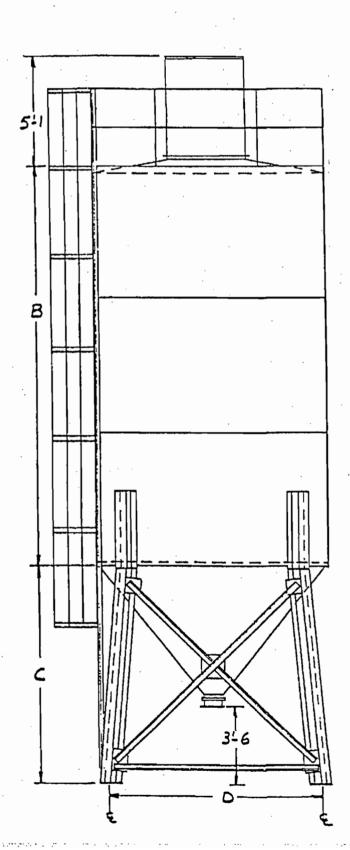
Mike G. Kleinkort

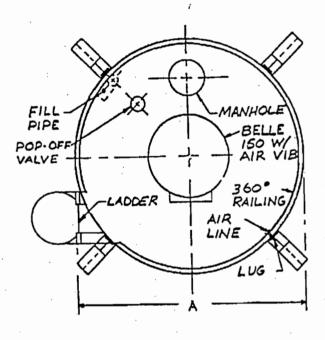
cc: Ed Spink Schwing America, Inc.

cemen tech.

Model S-450, S-550, S-700 AND S-900 CEMENT OR BULK MATERIALS SILO

EQUIPMENT SPECIFICATIONS and PURCHASE INFORMATION





STANDARD EQUIPMENT

- * Pneumatic fill pipe and adapter.
- * 150 sq. ft. baghouse for dust control.
- * Full perimeter safety cage and ladder.
- * Manhole and pressure relief valve.
- * Will handle bulk materials that weigh up to 100 lbs. per cu. ft.
- * Air system includes eight external air pads.
- * Slide or jam gate.
- * Straight leg base.
- * Industrial enamel paint, CTI white

* Dimension	Α	В	С	D		
450 ыы	10' 8"	18'0"	9' 10"	9' 10"		
550 bbl	10' 8"	24' 0"	9' 10"	9' 10"		
* (700 bbl	10' 8"	30' 0"	9' 10"	9' 10"		
900 bbl	12' 0"	30.0	10'6"	11'0"		
* proposed sile On equivalent						

Environmental Protection

TO:

Iwan Choronenko/Jerry Campbell

FROM:

Clair Fancy

DATE:

March 21, 1996

SUBJ:

Consent Order for Gulf Coast Recycling, Inc.

(PSD-FL-215)

After reviewing Gulf Coast's latest submittal, it appears that it may take considerably more time to issue a permit and bring this facility into compliance. Additionally, the permitting route does not actually require that projects be implemented to achieve compliance. Rather, it requires that compliance be achieved if a new project modification is approved and constructed.

To reach this objective more expeditiously, we believe that a consent order should be negotiated by the county <u>requiring</u> Gulf Coast to install BACT technology (i.e., SO2 scrubbing) for the blast furnace. Hillsborough County can then assume the permitting duties for the other ("synthetic minor") changes that Gulf Coast has applied for and also determine the appropriate compliance actions for operating over the last decade without PSD-required controls.

If you feel that we need to arrange a meeting to discuss this option, please let me know. Otherwise, we will assume that Hillsborough County will promptly begin the consent order process and handle the other permitting requests. Please give me a call if there are any questions or if you need anything more from us.

CHF/AAL

c: Jim Pennington, BAR Bill Thomas, SWD TO: Iwan Choronenko/Jerry Campbell

FROM: Clair Fancy

DATE: March 20, 1996

SUBJ: Consent Order for Gulf Coast Recycling, Inc.

(PSD-FL-215)

After reviewing Gulf Coast's latest submittal, it appears that it may take considerably more time to issue a permit and bring this facility into compliance. Additionally, the permitting route does not actually require that projects be implemented to achieve compliance. Rather, it requires that compliance be achieved if a new project modification is approved and constructed.

To reach this objective more expeditiously, we believe that a consent order should be negotiated by the county requiring Gulf Coast to install BACT technology (i.e., SO2 scrubbing) for the blast furnace. Hillsborough County can then assume the permitting duties for the other ("synthetic minor") changes that Gulf Coast has applied for and also determine the appropriate compliance actions for operating over the last decade without PSD-required controls.

If you feel that we need to arrange a meeting to discuss this option, please let me know. Otherwise, we will assume that Hillsborough County will promptly begin the consent order process and handle the other permitting requests. Please give me a call if there are any questions or if you need anything more from us.

CHF/AAL

c: Jim Pennington, BAR Bill Thomas, SWD

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of an Application for permit by:

DEP File No. PSD-FL-215 AC 29-209018 Hillsborough County

Mr. Willis Kitchen
President
Gulf Coast Recycling, Inc.

RECEIVED

MAR 1 5 1996

REQUEST FOR EXTENSION OF TIME

BUREAU OF AIR REGULATION

TO: Virginia Wetherell, Secretary
Department of Environmental Protection
2600 Blair Stone Road
Twin Towers Building
Tallahassee, Florida 32399-2400

GULF COAST RECYCLING, INC. ("Gulf Coast"), pursuant to Chapter 17-103.070, F.A.C., hereby requests a extension of time to file its formal Petition For Administrative Hearing, and in support hereof says:

1. Gulf Coast previously requested an extension of time to file an administrative petition. On November 21, 1995 GCR received a letter of incompleteness from the Department of Environmental Protection ("DEP") on this application. GCR has responded to the comments by DEP. GCR is awaiting DEP's response to that submittal.

WHEREFORE, Gulf Coast respectfully requests an extension of time until May 15, 1996 to file its Petition for Administrative Hearing, pursuant to Section 120.57, Florida Statutes.

I HEREBY CERTIFY that the original of the foregoing has been filed, via Federal Express, with Virginia Wetherell, Secretary of the Department of Environmental Protection, and copies sent to Office of General Counsel, Department of Environmental Protection,

2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and to the C. H. Fancy, P.E., Chief, Bureau of Air Regulation, State of Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399, this 13th day of March, 1996.

Respectfully submitted,

WILLIAM B. TAYLOR, IV, ESQUIRE

Fla. Bar No. 144329 SCOTT C. DAVIS, ESQUIRE

Fla. Bar No. 022799

Macfarlane Ausley Ferguson

& McMullen
Post Office Box 1531
Tampa, Florida 33601
(813) 273-4228

Attorney for Petitioner

cc: Gulf Coast Recycling, Inc.

KKB****\WBTMAIN\GCR\ADMINIST.HRG\120-57PET.Ex5



GULF COAST RECYCLING, INC.

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

March 15, 1996

Mr. A. A. Linero, P.E. Administrator, New Source Review Section Florida Department of Environmental Protection Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 RECEIVED

MAR 19 1998

BUREAU OF AIR REGULATION

RE: Construction Permit Application (PSD-FL-215)

Dear Mr. Linero:

Following are Gulf Coast Recycling's responses to your letter dated February 8, 1996 concerning unresolved issues regarding the referenced application. Our responses are numbered in correspondence to the numbering of issues raised in that letter.

Availability of the requested source test information for before and after desulfurization is very limited. Facility configurations in this industry vary considerably making finding representative data difficult. Two of the facilities referenced previously were built with desulfurization technology. Therefore, no before-desulfurization data for those facilities are available. A new smelter in Columbus, Georgia is configured with front-end desulfurization and a reverberatory furnace that exhausts through an SO₂ scrubber. The reason for the scrubber at this facility was so that it could be permitted as a minor source and avoid federal review. Emissions estimates without the scrubber showed annual SO₂ emissions to be very close to the 100 tons/yr threshold. It was then decided to install the secondary "controls" to assure that emissions would be less than 100 tons/yr and, subsequently, that the minor source status would be granted.

Recent CEM data show an SO₂ emission rate out of the scrubber of approximately 1 lb/hr. Backing out the scrubber design efficiency of 95% yields a scrubber inlet emission rate of approximately 20 lbs/hr, almost nine times lower than the 175 lbs/hr Gulf Coast has applied for. Even assuming an upper bound 99% scrubber efficiency would yield an inlet rate of 100 lbs/hr, still less than 60% of that applied for. Also, note that this reverberatory furnace had a charge rate of approximately 10.6 tons/hr during which these data were taken. This charge rate is over 1.5 times higher than the 6.5 tons/hr applied for by Gulf Coast. This supports Gulf Coast's assertion that the 175 lbs/hr emission rate applied for is attainable with desulfurization only.

Mr. A. A. Linero, P.E. March 15, 1996 Page 2

- Attached is a table summarizing Gulf Coast's Annual Operating Reports which have been submitted to the Florida DEP. Total Suspended Particulates (TSP) emissions for the most representative two-year period (1984-85) are 9.30 and 9.72 tons/year, respectively. The average for this two-year period is 9.51 tons/year which was used as the "baseline" for PSD applicability determination. To reiterate this determination, PSD is not applicable for TSP due to the difference between the requested (and currently permitted) rate of 20.4 tons/yr and the baseline rate of 9.51 tons/yr being less than the 15 tons/yr PSD significance level (20.4 9.51 = 10.89) which would even apply now for PM₁₀. The significance level for TSP in effect in the mid-eighties was 25 tons/yr.
- 3) In a memorandum dated January 22, 1996 from John Seitz, Director of the EPA OAQPS, and Robert Van Heuvelen, Director of the EPA Office of Regulatory Enforcement, to the EPA regional offices, an interim policy was released on federal enforceability of limitations on potential to emit (PTE). A copy is attached. This interim policy will remain in place until January 1997 or longer to coincide with the promulgation of revised regulations. The policy was initiated by two recent court decisions which involved federal enforceability and PTE issues. Manufacturers Association v. EPA the court remanded the potential to emit definition in the PSD and NSR regulations to EPA. The court also vacated the federal enforceability requirement of the PTE definitions in the PSD and NSR regulations. Among the effects these decisions have on the PSD and NSR programs is that "because the court vacated the rules, the requirements in the nationwide rules for PSD and major source NSR concerning federal enforceability are not in effect". The memo also states that "...certain netting transactions involving PTE limits under new source review programs may now take place without federal enforceability".

Footnote three on page six gives an example of how this interim policy would affect an existing source in an ozone nonattainment area that plans to add a new emissions unit. It states that the source could avoid major NSR and LAER by installing cheaper controls that reduce emissions to below the significance level and that the construction permit issued to allow this would be federally enforceable. This example closely mirrors Gulf Coast's situation and position that it can avoid major NSR and LAER by installing an afterburner that reduces emissions to below the significance level. The afterburner currently proposed by Gulf Coast would do so.

In light of this federal interim policy on a federal program it is hoped that the Florida DEP will implement this policy and approve the proposed control equipment. It remains Gulf Coast's position that the proposed afterburner and the process under which it is proposed to be approved are in line with EPA's guidance and policies concerning these issues.

Mr. A. A. Linero, P.E. March 15, 1996 Page 3

We hope this satisfies your most recent request for additional information and that the PSD permit can now be issued. If you have any questions or need additional information please contact me at (813) 626-6151.

Sincerely,

GULF COAST RECYCLING, INC.

ulielio m. Kitchen

Willis M. Kitchen President

WMK:lgc Attachments 460.2.1\460-96\0315LINE.23L

CC: B. Thomas, SWD L. Deken, EPCHC J. Harper, EPA J. Bunnak, NPS L. Carlson, Cake Eng. J. Pennolds, BAR

TABLE 4

GULF COAST RECYCLING ANNUAL OPERATING REPORT SUMMARY

YEAR	HOUR/YR	PRODUCTION TPY	COKETPY	TSP LDS/HR	TSPTPY	LEAD LIIS/HR	LEAD TPY	SO2 LBS/HR	SO2 TPY
1,978	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	0.080.0	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

hus 11/6, 459 194 6605 150 275.60

January 22, 1996

MEMORANDUM

SUBJECT: Release of Interim Policy on Federal Enforceability of

Limitations on Potential to Emit

FROM: John S. Seitz, Director

Office of Air Quality Planning and Standards (MD-10)

Office of Air and Radiation

Robert I. Van Heuvelen, Director

Office of Regulatory Enforcement (2241A)

Office of Enforcement and Compliance Assurance

TO: Regional Office Addressees (see below):

The purpose of this memorandum is to notify you that the Agency is today releasing detailed guidance (referred to below as the "Interim Policy") clarifying the immediate impacts of two recent decisions by the U.S. Court of Appeals for the D.C. Circuit regarding EPA regulations requiring federal enforceability of limitations on a source's potential to emit ("PTE") under certain CAA programs. This cover memorandum briefly summarizes the court decisions, and briefly summarizes the immediate impacts of the decisions on current regulations. A more detailed discussion of the impacts of the two court decisions is attached. The policy will remain in place until January 1997, but may be extended if necessary to coincide with the promulgation of revised regulations.

The Court Decisions

In <u>National Mining Association v. EPA</u>, 59 F.3d 1351 (D.C. Cir. 1995), the court addressed hazardous air pollutant programs under section 112. The court found that EPA had not adequately explained why <u>only</u> federally enforceable measures should be considered as limits on a source's potential to emit. Accordingly, the court remanded the section 112 General

Provisions regulation to EPA for further proceedings. EPA must either provide a better explanation as to why federal enforceability promotes the effectiveness of state controls, or remove the exclusive federal enforceability requirement. The court did not vacate the section 112 regulations, that is, the court did not declare the regulations null and void. The regulations remain in effect pending completion of new rulemaking.

In <u>Chemical Manufacturers Ass'n v. EPA</u>, No. 89-1514 (D.C. Cir. Sept. 15, 1995), the court, in light of <u>National Mining</u>, remanded the PTE definition in the PSD and NSR regulations to EPA. The court also vacated the federal enforceability requirement of the PTE definitions in the PSD and NSR regulations.

Summary of Immediate Impacts of the Court Decisions

EPA plans to propose rulemaking amendments in spring 1996 that would address the federal enforceability issue as it relates to section 112, title V, and Prevention of Significant Deterioration & New Source Review ("PSD/NSR") regulations. Pending this rulemaking, the immediate impacts are as follows:

Effects on Section 112. Because the court did not vacate the rule, the current part 63 regulations, requiring federal enforceability, remain in effect.

Effects on title V. Although neither court case addressed the title V regulations, industry challenges to the part 70 requirements are pending. Because the federal enforceability provision of the title V regulations are closely related to the regulations addressed in the two decided cases, EPA will ask the court to leave part 70 in place as the rulemaking amendments are being developed.

Effects on PSD/NSR. Because the court vacated the rules, the requirements in the nationwide rules for PSD and major source NSR concerning federal enforceability are not in effect. In many cases, however, individual State rules implementing these programs have been individually approved in the State Implementation Plan (SIP). The court did not vacate any requirements for federal enforceability in these individual State

rules, and these requirements remain in place. As discussed in detail in the Interim Policy, the immediate practical impacts on the PSD/NSR programs are not substantial for newly constructed major sources. Greater impacts may exist for existing major sources seeking to avoid review by demonstrating a net emissions decrease.

Effects on January 25, 1995 Transition Policy. The transition policy remains in effect with one change. For sources emitting more than 50% of the major source threshold, and holding State-enforceable limits, EPA is no longer requiring that the source submit a certification to EPA.

Distribution/Further Information

The Regional Offices should send this memorandum to States within their jurisdiction. Questions concerning specific issues and cases should be directed to the appropriate Regional Office. Regional Office staff may contact Tim Smith of the Integrated Implementation Group at 919-541-4718, Adan Schwartz of the Office of General Counsel at 202-260-7632, or Julie Domike of the Office of Enforcement and Compliance Assurance at 202-564-6577. The document is also available on the technology transfer network (TTN) bulletin board, under "Clean Air Act, Title V, Policy Guidance Memos." (Readers unfamiliar with this bulletin board may obtain access by calling the TTN help line at 919-541-5384).

Attachment

Addressees:

Director, Office of Ecosystem Protection, Region I
Director, Air and Waste Management Division, Region II
Director, Air, Radiation, and Toxics Division, Region
III

Director, Air, Pesticides, and Toxics Management Division, Region IV

Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division,
Region VI

Director, Air, RCRA, and TSCA Division, Region VII
Assistant Regional Administrator, Office of Pollution
Prevention, State and Tribal Assistance, Region VIII
Director, Air and Toxics Division, Region IX
Director, Office of Air, Region X

Regional Counsels, Regions I-X

Director, Office of Environmental Stewardship, Region I Director, Division of Enforcement and Compliance Assurance, Region II

Director, Enforcement Coordination Office, Region III
Director, Compliance Assurance and Enforcement
Division, Region VI

Director, Enforcement Coordination Office, Region VII
Assistant Regional Administrator, Office of
Enforcement, Compliance and Environmental Justice,
Region VIII

Enforcement Coordinator, Office of Regional Enforcement Coordination, Region IX

EPA INTERIM POLICY ON FEDERAL ENFORCEABILITY REQUIREMENT FOR LIMITATIONS ON POTENTIAL TO EMIT January 1996

This document provides guidance clarifying the immediate impacts of recent court decisions related to federal enforceability of limitations on a source's potential to emit ("PTE"). In brief, most current regulatory requirements and policies regarding PTE, including the interim policy recognizing state-enforceable limits under section 112 and Title V in some circumstances, remain in effect while EPA conducts expedited rulemaking to address these issues in detail. However, at present, certain netting transactions involving PTE limits under new source review programs may now take place without federal enforceability. Today's guidance will be superseded upon completion of the new rulemaking.

Background

Several important Clean Air Act programs apply to only major sources, i.e., those that "emit or have the potential to emit" amounts exceeding major source thresholds listed in the Act. EPA has promulgated regulations defining the term "potential to emit" for most of these programs. In particular, five sets of regulations are in place implementing the major source prevention of significant deterioration (PSD) and nonattainment area new source review (NSR) permitting programs (40 CFR 51.166, 40 CFR 52.21, 40 CFR 51.165, Appendix S of 40 CFR Part 51, and 40 CFR Regulations governing approvability of state operating permit programs under Title V of the CAA are contained in 40 CFR Part 70, and EPA has proposed regulations implementing a federal operating permits program that are to be promulgated at 40 CFR Part 71. Regulations implementing the requirements of section 112 of the Act related to major sources of hazardous air pollutants are contained in 40 CFR Part 63, subpart A.

For each of the above Clean Air Act programs, the EPA regulations provide that "controls" (i.e., both pollution control equipment and operational restrictions) that limit a source's maximum capacity to emit a pollutant may be considered in determining its potential to emit. Historically, large numbers of new or modified sources that otherwise would be subject to PSD and NSR permitting requirements have limited their PTE in order to obtain "synthetic minor" status and thereby avoid major source

requirements. With the advent of operating permit programs under Title V and the MACT program under section 112, many sources that otherwise would be subject to these new requirements under the Clean Air Act Amendments of 1990 also have obtained, or plan to obtain, PTE limits to avoid coverage. For each of these programs, EPA regulations have required that PTE limits be "federally enforceable" in order to be considered in determining PTE.

These federal enforceability requirements were the subject of two recent decisions of the D.C. Circuit Court of Appeals. The first decision, National Mining Association v. EPA, 59 F.3d 1351 (D.C. Cir. July 21, 1995), dealt with the potential to emit definition under the hazardous air pollutant programs promulgated pursuant to CAA section 112. In this decision, the Court implicitly accepted EPA's argument that only "effective" stateissued controls should be cognizable in limiting potential to In addition, the court did not question the validity of current federally enforceable mechanisms in limiting PTE. However, the court found that EPA had not adequately explained why only federally enforceable measures should be considered in assessing the effectiveness of state-issued controls. Accordingly, the Court remanded the section 112 General Provisions regulation to EPA for further proceedings. Thus, EPA must either provide a better explanation as to why federal enforceability promotes the effectiveness of state controls, or remove the exclusive federal enforceability requirement. court did not vacate the section 112 regulations, and they remain in effect pending completion of EPA rulemaking proceedings in response to the court's remand.

The second decision, <u>Chemical Manufacturers Ass'n v. EPA</u>, No. 89-1514 (D.C. Cir. Sept. 15, 1995), dealt with the potential to emit definition in the PSD and NSR programs. Specifically, this case challenged the June 1989 rulemaking in which the EPA reaffirmed the requirement for federal enforceability of PTE limits taken to avoid major source permitting requirements in these programs. In a briefly worded judgment, the court, in light of <u>National Mining</u>, remanded the PSD and NSR regulations to EPA. In addition, in contrast to its disposition of the section 112 regulations in <u>National Mining</u>, the court in <u>Chemical Manufacturers</u> vacated the federal enforceability requirement of the PTE definitions in the PSD and NSR regulations.

In a third set of cases, industry challenges to the federal enforceability requirements in Part 70 are pending before the D.C. Circuit. The Title V cases have not been briefed. However, since the federal enforceability provisions of these Title V regulations are closely related to the regulations addressed in the two decided cases, EPA plans to ask the court to remand the regulations to EPA for further rulemaking, and to leave Part 70 in place during the new rulemaking.

Plans for Rulemaking Amendments

EPA plans to hold discussions with stakeholders and propose rulemaking amendments by spring 1996, and to issue final rules by spring 1997, that would address the court decisions impacting regulations promulgated pursuant to section 112 and the PSD/NSR regulations. At the same time, EPA will propose a parallel approach to cognizable PTE limits for major sources subject to title V. EPA currently plans to address the following options, after discussions with stakeholders:

- (a) An approach that would recognize "effective" State-enforceable limits as an alternative to federally enforceable limits on a source's potential to emit. Under this option, a source whose maximum capacity to emit without pollution controls or operational limitations exceeds relevant major source thresholds may take a State or local limit on its potential to emit. In such circumstances, the source must be able to demonstrate that the State-enforceable limits are (1) enforceable as a practical matter, and (2) being regularly complied with by the facility.
- (b) An approach under which the EPA would continue to require federal enforceability of limits on a source's potential to emit. Under this approach, in response to specific issues raised by the court in <u>National Mining</u>, EPA would present further explanation regarding why the federal enforceability requirement promotes effective controls. Under this approach, EPA would propose simplifying changes to the administrative provisions of the current federal enforceability regulations.

The remainder of this guidance memorandum addresses the immediate impacts of the court decisions on each of the three programs, in light of the upcoming rulemaking.

Effects on PSD/NSR

EPA interprets the court's decision to vacate the PSD/NSR federal enforceability requirement in the Chemical Manufacturers case as causing an immediate change in how EPA regulations should be read, although EPA expects that the effect of this change will be limited. Specifically, provisions of the definitions of "potential to emit" and related definitions requiring that physical or operational changes or limitations be "federally enforceable" to be taken into account in determining PSD/NSR applicability, the term "federally enforceable" should now be read to mean "federally enforceable or legally and practicably enforceable by a state or local air pollution control agency." For the reasons discussed below, however, the practical effects of the vacatur will be limited during the period prior to

¹Both <u>National Mining</u> and <u>Chemical Manufacturers</u> directly addressed only the definition of potential to emit, and not related definitions that also employ the federal enforceability requirement, in particular, those related to netting. e.g., 40 CFR § 52.21(b)(3)(vi)(b) providing that an emissions decrease is creditable only if it is "federally enforceable.") The court's concerns regarding the adequacy of EPA's rationale, however, appear to extend to these netting provisions; consequently, EPA interprets the vacatur as extending to them as well. Conversely, EPA reads the vacatur as not extending to aspects of the PTE definition other than the federal enforceability provision. Such other aspects (e.g., determining a source's "maximum capacity" to emit in the absence of controls) were not at issue in the litigation and not addressed by the court decisions. In addition, EPA interprets Chemical Manufacturers as not addressing the regulatory requirements for federal enforceability of offsets used to comply with NSR requirements. CAA § 173(a) expressly requires that any emissions reductions required as a precondition to the issuance of a nonattainment NSR permit to be "federally enforceable" before the permit may be issued. This requirement is not affected by the court decisions.

completion of new EPA rulemaking on this issue. During this interim period, federal enforceability is still required to create "synthetic minor" new and modified sources in most circumstances pending completion of EPA's rulemaking.

First, EPA interprets the order vacating certain provisions of EPA regulations as not affecting the provisions of any current SIP, or of any permit issued under any current SIP. Thus, previously issued federally enforceable permits, such as permits issued under federally enforceable state operating permit programs under Title I ("FESOPPS") remain in effect. Likewise, EPA-approved state PSD and NSR SIP rules requiring that all pollution controls or operational restrictions limiting potential to emit be federally enforceable remain in place, even though such provisions may have been based on the now-vacated terms of EPA regulations.²

The situation is somewhat different in the several states lacking approved PSD programs, which are governed instead by the federal PSD program at 40 CFR § 52.21. (In most instances, these states have been delegated authority to issue PSD permits under the federal program pursuant to § 52.21(u).) Since these states do not have an EPA-approved PSD program, their SIPs presumably also lack state rules containing a blanket requirement that new or modified sources use only federally enforceable limits on PTE when seeking synthetic minor status to avoid PSD. sources in these states have been subject to the federal enforceability requirements of § 52.21. As noted above, Chemical Manufacturers vacated the requirements in § 52.21 that physical or operational changes be "federally enforceable" to be taken into account in determining the applicability of PSD to a proposed new source or modification. Accordingly, in states governed by § 52.21, a limit that is either "federally enforceable or legally and practicably enforceable by a state or local air pollution control agency" may now be used in determining PSD applicability in some circumstances. The effect of the vacatur in these states is limited, however, because as discussed below, new and modified sources in these states are still subject to the requirement to obtain federally enforceable minor source permits.

Second, a new or modified source that seeks to lawfully avoid compliance with the "major" source requirements of either PSD or nonattainment NSR by limiting its potential to emit to achieve synthetic minor status must still obtain a general or "minor" NSR preconstruction permit under section 110(a)(2)(C) of the Act and 40 C.F.R. § 51.160-164. Every SIP contains a minor NSR program that applies generally to new or modified sources of air pollutants, without regard to whether those sources are "major." Permits under such programs are, like all other SIP measures, federally enforceable. See CAA section 113(b)(1); 40 CFR § 52.23. The requirement under section 110(a)(2)(C) to obtain a federally enforceable minor NSR permit was not at issue in the Chemical Manufacturers case, and is unaffected by the court's ruling.

As noted above, the court's action does not affect FESOPPs that many states have adopted as an additional mechanism for avoiding PSD/NSR or for creating an emissions reduction credit that may be tradeable to another source. Permits issued under such programs continue to be valid for purposes of limiting PTE. States are free to submit SIP revisions to remove such provisions in light of the vacatur, and to substitute mechanisms that are legally and practicably enforceable by the state for limiting potential to emit in some circumstances under the PSD/NSR program. However, we expect few states to do so pending the outcome of new EPA rulemaking on the broader federal enforceability issue.

³Consider, for example, an existing source in a moderate ozone nonattainment area that plans to add a new emissions unit that would have the potential to emit 100 tons per year ("TPY") of VOC if uncontrolled, and would therefore be considered a major modification subject to major NSR requirements, including a requirement to install pollution controls representing LAER that would reduce emissions in this instance by 90%. The source may instead seek to avoid major NSR by installing cheaper controls that reduce emissions by 61% and thereby limit the emissions increase to 39 TPY -- just below the "major" modification threshold. Such a source would still need to obtain a minor NSR permit to construct the new unit, and that permit would be federally enforceable.

Likewise, states conceivably might now seek to reduce the scope of SIP-approved minor NSR programs where they are presently broader than minimum federal requirements (e.g., to no longer cover changes at existing emissions units that reduce emissions to create a netting credit or tradeable emission reduction credit), and to substitute state-enforceable mechanisms. also, however, EPA does not expect states to seek such changes pending the outcome of EPA rulemaking. In addition, regarding the minimum scope of minor NSR programs, section 110(a)(2)(C) provides that state minor NSR programs must regulate all new or modified sources "as necessary" to insure consistency with air quality planning goals. Given the central role of new and modified synthetic minor sources in the overall PSD/NSR regulatory scheme, and the adverse environmental consequences if controls were not effective in limiting PTE, it is unlikely that states would have the legal ability to exclude from such programs transactions that are intrinsic to the avoidance of major NSR permitting requirements.

The principal immediate impact of the vacatur of the PSD/NSR federal enforceability regulations likely will occur in cases involving "netting" exercises at existing sources, where a source seeks to internally offset an emissions increase at a new or modified emissions unit by installing pollution controls or accepting operational limitations at another unit within the plant. For the reasons discussed above, in such cases the new or modified unit would still need to obtain a federally enforceable minor NSR permit. In contrast, the vacatur ordered by the court may allow the unit that is limiting its emissions to rely in some circumstances on controls that are legally and practicably enforceable by the state. Note, however, that under the terms

⁴Consider, for example, an existing source like the one addressed above in Footnote 3, that also plans to install a new unit that would have the potential to emit 100 tons per year of VOC per year if uncontrolled. In contrast to the earlier example, however, this source plans to avoid major NSR not by controlling the new unit, but instead by installing controls at another emissions unit at the plant whose baseline emissions are 100 TPY that will reduce actual emissions by 61 TPY. The overall result of this netting transaction is the same as in the earlier example: a net emissions increase of 39 TPY at the plant. The

of many state minor NSR programs, the unit undergoing an emissions reduction would still need to be included in the minor NSR permit. Also, if the state's SIP has a general requirement that PTE limits be federally enforceable, the unit reducing emissions would still need a federally enforceable limit. Such programs would not be affected by the court's ruling. In sum, the precise impact of the vacatur on PSD/NSR applicability in any state can be definitively established only by reviewing the provisions of a particular SIP.

Effects on Section 112 and Title V

The <u>National Mining</u> decision did not vacate the current definition of a major source under section 112 program in the General Provisions to Part 63, and neither of the court decisions addressed the definition of a major source for the title V program in 40 CFR part 70. Both of these current definitions, therefore, remain in effect. As discussed above, however, these regulations will be affected by the rulemaking EPA is conducting in response to the court decisions.

EPA today reiterates that independent from the decision in National Mining, current EPA policy already recognizes State-enforceable PTE limits under section 112 and Title V in many circumstances under a transition policy intended to provide for orderly implementation of these new programs under the Clean Air Act Amendments of 1990. This policy is set forth in a memorandum, "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act" (January 25, 1995). The transition policy is summarized below; as noted, EPA is now making one significant change in that policy in light of National Mining.

In recognition of the absence in some states of suitable federally enforceable mechanisms to limit PTE applicable to sources that might otherwise be subject to section 112 or Title

new unit would still need to obtain a minor NSR permit, and that permit would still be federally enforceable. In light of the vacatur in <u>Chemical Manufacturers</u>, however, the existing unit that is adding controls now may be able to limit its PTE using a state-enforceable permit.

V, EPA's policy provides for the consideration of State-enforceable limits as a gap-filling measure during a transition period that extends until January 1997. Under this policy, for the 2-year transition period, restrictions contained in State permits issued to sources that actually emit more than 50 percent, but less than 100 percent, of a relevant major source threshold are treated by EPA as acceptable limits on potential to emit, provided: (a) the permit and the restriction in particular are enforceable as a practical matter; (b) the source owner submits a written certification to EPA accepting EPA and citizen enforcement. In light of National Mining, EPA believes that the certification requirement is no longer appropriate as part of this policy. Accordingly, EPA hereby amends the January 1995 transition policy by deleting the certification requirement.

In addition, under the transition policy, sources with consistently low levels of actual emissions relative to major source thresholds can avoid major source requirements even absent any permit or other enforceable limit on PTE. Specifically, the policy provides that sources which maintain their emissions at levels that do not exceed 50 percent of any applicable major source threshold are not treated as major sources and do not need a permit to limit PTE, so long as they maintain adequate records to demonstrate that the 50 percent level is not exceeded.

Under the terms of EPA's transition policy, the transition period is to end in January 1997. In addition, completion of EPA's rulemaking in response to the recent court decisions, which EPA anticipates will occur by early 1997, may render the transition policy unnecessary after that time. However, in conjunction with the rulemaking, EPA will consider whether it is appropriate to extend the transition period beyond January 1997.

⁵Since PSD and nonattainment NSR are mature programs, minor NSR permits to limit PTE were available in all states well prior to enactment of the Clean Air Act Amendments of 1990. Hence, EPA's transition policy does not extend to those programs.

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STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of an Application for permit by:

DEP File No. PSD-FL-215 AC 29-209018 Hillsborough County

Mr. Willis Kitchen
President
Gulf Coast Recycling, Inc.

REQUEST FOR EXTENSION OF TIME

RECEIVED

TO: Virginia Wetherell, Secretary
Department of Environmental Protection
2600 Blair Stone Road
Twin Towers Building
Tallahassee, Florida 32399-2400

FEB 09 1996 BUREAU OF AIR REGULATION

GULF COAST RECYCLING, INC. ("Gulf Coast"), pursuant to Chapter 17-103.070, F.A.C., hereby requests a extension of time to file its formal Petition For Administrative Hearing, and in support hereof says:

1. Gulf Coast previously requested an extension of time to file an administrative petition. On November 21, 1995 GCR received the latest letter of incompleteness from the DEP on this application. GCR responded to the comments by DEP and EPC and gathered the requested additional information. The response to the comments and additional information was submitted to the DEP on January 10, 1996. GCR is awaiting DEP's response on that submittal.

WHEREFORE, Gulf Coast respectfully requests an extension of time until March 15, 1996 to file its Petition for Administrative Hearing, pursuant to Section 120.57, Florida Statutes.

I HEREBY CERTIFY that the original of the foregoing has been

filed, via Federal Express, with Virginia Wetherell, Secretary of the Department of Environmental Protection, and copies sent to Office of General Counsel, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and to the C. H. Fańcy, P.E., Chief, Bureau of Air Regulation, State of Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399, this 7th day of January, 1996.

Respectfully submitted,

W, ESQUIRE

WILLIAM B. TAYLOR, Fla. Bar No. 144329

SCOTT C. DAVIS, ESQUIRE

Fla. Bar No. 022799

Macfarlane Ausley Ferguson

& McMullen

Post Office Box 1531

Tampa, Florida 33601

(813) 273-4228

Attorney for Petitioner

cc: Gulf Coast Recycling, Inc.

KKB****\WBTMAIN\GCR\ADMINIST.HRG\120-57PET.Ex4



Department of Environmental Protection

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

Virginia B. Wetherell Secretary

February 8, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

RE: Construction Permit Application (PSD-FL-215)

Dear Mr. Kitchen:

This concerns your January 10 letter responding to the Department's November 21, 1995, request for further information. Several requested items remain unanswered, therefore, those are restated below:

- 1. The "before desulfurization" emissions requested were <u>not</u> the emissions "prior to the desulfurization step" in the process, but rather emissions from the plant <u>prior to the installation of the desulfurization technology</u> (so that the effect of desulfurization can be based on fact and not on an estimated percentage removal). The burden is on the applicant to provide the Department with all relevant data requested that are in the public domain, as are all compliance test results on file in Florida and other states. As the "after desulfurization" data are obviously in existence, the Department must have this in order to deem the application complete.
- 2. The Department's request consisted of correcting the stated rationale for determining PSD applicability, realizing that the conclusion is not at issue. Whenever a PSD applicability question is addressed in a permit application, the discussion must explain how the new allowable emissions compare with the most recent (or most representative) two-year average actual emissions. This point is frequently misunderstood or overlooked in applications. As this affects Gulf Coast's newly revised request for particulate matter emissions of 20.4 tons/yr, the application must show how the 9.51 tons of actual emissions/yr was derived (identify the two years and tons for each year).
- 3. Gulf Coast argues that it can select the control equipment it deems necessary and, since that selection must be treated as part of the source's design once installed, the Department must consider the resulting emissions as the new permit limits, as they would represent the new 'potential to emit' and be federally enforceable. Under this interpretation, Gulf Coast would be doing its own

Mr. Willis M. Kitchen February 8, 1996 Page Two

control technology assessment and setting its own permit limits, thus entirely preempting new source review. Gulf Coast cites the Draft EPA New Source Review Manual, Section II.B.6., emphasizing that a "contemplated" air pollution control system can be included in a source's potential to emit, where the use of such equipment is federally enforceable. However, the use of such contemplated equipment would not be federally enforceable unless it undergoes new source review and is reflected through limits in a PSD permit.

The Department stands by its prior statement that a control strategy must be the result of permitting review based on current emissions. If Gulf Coast desires not to do the required new source review for VOC emissions, then, due to the circumstances of this application, the Department will do it.

If there are any questions, please contact me or John Reynolds at 904-488-1344.

Sincerely,

A. A. Linero, P.E.

Administrator

New Source Review Section

AAL/JR

B. Thomas, SWD

- L. Deken, EPCHC
- J. Harper, EPA J. Bunyak, NPS
- L. Carlson, Lake Eng.

Florida Department of

Environmental Protection

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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:

February 7, 1996

TO:

John Reynolds

FROM:

SUBJECT: Gulf Coast Recycling, Inc. - PSD Application

Incompletion Response

I have reviewed the response submitted by Lake Engineering on behalf of Gulf Coast Recycling, Inc. I have also discussed the information presented with Jerry Campbell. Based on the tone and content of their latest response, we don't have any further information requests at this time. Some of the information which we have requested has not throughly been provided or the intent of the question was not clearly conveyed in the incompletion letter. However, at this time because the permit for the blast furnace has taken so long to process we feel it is appropriate to go ahead and process the application with the information obtained to date. This does not mean we concur with all of the responses provided in the incompletion letter response or that we concur with their BACT determination. However, we will use the information provided and conduct our own BACT analysis and supply it along with recommended permit conditions for the facility.

Should you have any questions or require additional information regarding this issue please feel to contact me or Jerry Campbell at Suncom 543-5530.



GULF COAST RECYCLING, INC.

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

January 10, 1996

Mr. A. A. Linero, P.E. Administrator, New Source Review Section Florida Department of Environmental Protection Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

RECEIVED

JAN 12 1996

BUREAU OF AIR REGULATION

RE: Construction Permit Application (PSD-FL-215)

Dear Mr. Linero:

Following are Gulf Coast Recycling's responses to the request for additional information outlined in your incompleteness letter dated November 21, 1995 regarding our pending revised PSD application.

DEP Comments

1) Attached is a letter from M. A. Industries to Gulf Coast stating that Gulf Coast can expect an average lead paste sulfur content of 1.5% by weight after desulfurization. This lead paste, added with the non-paste lead scrap that will have a sulfur content less than 1%, results in the overall 1% sulfur content used in the equation on page 17 of the revised PSD application. There are three facilities that utilize desulfurization as their only SO₂ "control": Quemetco Inc. in Indianapolis, IN, facility no. 10 in Table 4-1 of EPA document no. 453/R-94-024a, Secondary Lead Smelting Background Information Document for Proposed Standards Volume 1 (Background Information Document, attached), Gopher Smelting and Refining Company in Eagan, MN (facility no. 14), and The Doe Run Company in Boss, MO (facility no. 15). Pages C-16 and C-17 of the Background Information Document, also attached, lists the facilities currently operating and their configuration, including those that have desulfurization capabilities. Those facilities with scrubbers and those with desulfurization without scrubbers are marked.

Gulf Coast does not have the charge rate and testing data requested for these facilities. In fact, the before-desulfurization data are not available. This is due to the fact that desulfurization is not traditional end-of-pipe control equipment but is an actual pollution preventing step in the process. Therefore, no testing can

Mr. A. A. Linero, P.E. January 10, 1996 Page 2

be done prior to the desulfurization step. It was Gulf Coast's intent to point out that desulfurization has been accepted in three real-world instances as the only "controls" required, proving its use as a cost-effective means of reducing SO₂ emissions. It remains Gulf Coast's position that this is an environmentally superior means of control since it produces no adverse impacts to other media as scrubbing would.

The particulate matter analysis on page 22 of the application (and Table 2.1 on page 7) shows proposed allowable emissions from the blast furnace to be 14.02 tons per year. It was stated that since this is below the 15 tons/year threshold PSD/BACT is not applicable. The DEP stated that this was an incorrect rationale since NSR applicability depends on a comparison of the proposed allowable emissions with the actual emissions averaged over the most recent two year period. The rationale for Gulf Coast's statement that PSD/BACT does not apply is based on the fact that the proposed allowable emissions alone do not exceed the 15 tons/yr threshold. Therefore, it is impossible for the difference between the proposed allowable and past actual emissions to exceed 15 tons/yr. Even if the old furnaces had zero emissions, 14.02 - 0 = 14.02 which is less than 15. The emission rate during the two years prior to the replacement of the two blast furnaces in 1984 is, therefore, irrelevant.

However, Gulf Coast now wishes to keep its current permitted particulate matter emission rate of 5.2 lbs/hr and 20.4 tons/12 consecutive month period (condition no. 8B in its Lead RACT permit no. AC29-258634) in effect. A revised Table 2.1 is attached showing that PSD/BACT is still not applicable. The old furnace emissions were 9.51 tons/yr, resulting in a potential increase of 10.89 tons/yr. This is less than the PSD significance level of 15 tons/yr. Gulf Coast is hereby withdrawing it previous request of an allowable rate of 14.02 tons/yr.

Potential to emit is defined in 40 CFR 52.21 (b)(4), 51.165 (a)(1)(iii), and 51.166 (b)(4) as "the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment... shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable." Also, the Draft EPA New Source Review Workshop Manual states in Section II.B.6., Methods for Determining Potential to Emit, that one can take into account "the efficiency of the air pollution control system, if any, in use or contemplated for the worst case conditions, where the use of such equipment is federally-enforceable."

The permit resulting from the PSD application will be federally enforceable. Therefore, the potential to emit from the blast furnace may be calculated

downstream of any control equipment. Gulf Coast is willing to accept a federally-enforceable permit condition requiring the use of the afterburner at a minimum 95% efficiency, enforceable through the monitoring of the afterburner temperature and residence time as applied for. This efficiency will result in the proposed VOC emission rates of 1.655 lbs/hr and 7.25 tons/yr. On pgs. 3-10 — 3-12 of the Background Information Document it states that previous EPA studies have demonstrated that the destruction efficiency of an afterburner operated at 1,598°F and a residence time of 0.7 seconds is 98 percent (attached). Table 3-6 on page 3-11 shows the operating parameters of the afterburners controlling blast furnaces in this industry. Also attached are specifications from Raytheon Engineers and Constructors for the afterburner being proposed by Gulf Coast.

- 4) Gulf Coast is not required to be in compliance with the lead industry MACT until June 1997. Therefore, it is believed that it is not currently an applicable requirement. Gulf Coast has met its initial notification commitment which is not considered a compliance requirement. Gulf Coast's MACT compliance strategy will be addressed in Gulf Coast's Title V application. This was agreed to by Mr. John Reynolds of the DEP during a telephone conversation with Lake Engineering on November 29, 1995.
- 5) The Hillsborough County Environmental Protection Commission's comments are addressed below.
- 6) Comparison programs were not utilized to compare the Maxi-File outputs; they were completed manually. Therefore, none are attached. Lake Engineering discussed this with Mr. Cleve Holladay of the DEP on November 30, 1995.

Hillsborough County EPC Comments

- 1) Gulf Coast is hereby requesting to keep the permitted lead emission rate for the furnace at its current 1.810 lbs/hr level, which is stated in its Lead RACT permit (condition no. 7D). Gulf Coast is also requesting to continue the current limit on the furnace hours of operation of 7,800 hrs/yr. This will result in an annual lead emission rate limit of 7.06 tons/yr. These emission rates and hours of operation are incorporated in the attached updated PSD Applicability table (Table 2.1). Gulf Coast had previously requested a lower lead emission rate and increased hours of operation. This previous request is now being withdrawn.
- It is believed that Gulf Coast is currently in compliance with all of the applicable requirements of Particulate Matter RACT (PMRACT) through its Lead RACT permit, no. AC29-258634. Each of the operation and maintenance requirements for compliance with the Lead RACT will also be applicable for PMRACT. The

applicable PMRACT emission limiting standard, rule 62-296.712 F.A.C., limits particulate matter emissions from the blast furnace (any source which is not specifically listed in 62-296.401 through 62-296.415 and 62-296.701 through 62-296.711) to 0.03 gr/dscf or actual baghouse collection efficiency of 98 percent. NSPS subpart L (40 CFR 60.122a) limits particulate matter emissions from blast furnaces to 0.022 gr/dscf. This standard is reiterated as specific condition number 8A in the Lead RACT permit. The facility-wide PMRACT issue will be addressed in more detail in Gulf Coast's Title V application. The pending PSD application is only for the construction and operation of the blast furnace.

- The EPC states that the Lead RACT and operating permits limit the charge rate of lead scrap to 88% and that calculations in the revised PSD application were done using a lead scrap charge rate of 80%. This is partially incorrect. The 88% figure that EPC speaks of is for lead scrap and re-run slag. The individual charge rates are approximately 79.2% lead scrap and 8.8% slag, giving the combined 88%. This is the reason the 80% figure for lead scrap was used in the calculations.
- 4) Production charge rate (process rate) records are routinely kept as required by Specific Condition No. 19 of Gulf Coast's current permit.
- The referenced table shows an emission factor in lbs SO₂/ton Pb produced. The AP-42 emission factor used in the application is based on tons of material processed, not lead produced. Therefore, the two are not directly comparable. The AP-42 factor was used to yield a conservative emission reduction percentage. If the average of the referenced source tests is used as the uncontrolled factor, it is shown that the 80 lbs/ton has not been exceeded and a similar desulfurization reduction efficiency will be realized:

AP-42 Factor

80 lbs SO_2 /ton processed x 6.5 tons processed/hr = 520 lbs SO_2 /hr [520 lbs/hr - 175 lbs/hr (requested)] ÷ 520 lbs/hr = 66.4% reduction

Referenced Source Tests

111.4 lbs SO_2 /ton produced (test avg.) x 0.6 ton Pb prod./ton processed* = 66.84 lbs SO_2 /ton processed

66.84 lbs SO_2 /ton processed x 6.5 tons processed/hr = 434.46 lbs SO_2 /hr [434.46 lbs/hr - 175 lbs/hr (requested)] ÷ 434.46 lbs/hr = **59.7%** reduction

- * Note: The lead production factor of 0.6 ton/ton material processed is an average.
- No additional information is requested. This issue will be addressed in Gulf Coast's Title V application, which is due in approximately 6 months.

- 7) No additional information is requested.
- Solic Coast is not required to be in compliance with the lead industry MACT until June 1997. Therefore, it is believed that it is not currently an applicable requirement. Gulf Coast has met its initial notification commitment which is not considered a compliance requirement. Gulf Coast's MACT compliance strategy will be addressed in Gulf Coast's Title V application. This was agreed to by Mr. John Reynolds of the DEP during a telephone conversation with Lake Engineering on November 29, 1995.
- 9a) Of the 23 lead-acid battery recycling facilities currently operating in the U. S., only nine have SO₂ scrubbers. In addition, of the eight blast furnace-only facilities, only one utilizes a SO₂ scrubber (see attached Table 4-1 from the Background Information Document). No facility currently operating uses any SO₂ control other than a scrubber or desulfurization, providing the requested reasonable assurance that the control technologies evaluated in the application (wet and dry scrubbing, and desulfurization) are the best available. As stated previously there are three facilities which utilize desulfurization as their only SO₂ "control".

The average cost effectiveness of each of the SO_2 control technologies presented were provided in the analysis. The results are: \$414/ton for dry scrubbing (pgs. 10-11), \$1,193/ton for wet scrubbing (pgs. 13-14), and \$240/ton for desulfurization (pg. 19).

9b) Again, the average cost effectiveness of each control technology was provided (see number 9a above). The incremental costs are:

Wet scrubbing:

\$1,595,674/ton (assuming a one-ton annual reduction over dry scrubbing when in actuality they are assumed to have equal control

efficiencies and, therefore, have the same annual reduction)

Dry scrubbing:

\$901/ton

- 9c) The table on page 24 of the revised application shows EPA BACT/LAER determinations from cupola and blast furnaces for all industries (none were from the secondary lead industry). The BACT determinations from the SCAQMD are for cupola and blast furnaces from the secondary lead industry specifically. These SCAQMD determinations were, therefore, determined to be more representative of Gulf Coast. And, since this technology is the top choice and it was chosen as BACT for this project, no cost effectiveness is required.
- 10) No additional information is requested.

Mr. A. A. Linero, P.E. January 10, 1996 Page 6

It is hoped that this letter satisfies your request for additional information and that the pending application can now be approved. However, if you have any questions or require additional information (including revised portions of the application concerning the revised requested lead and particulate matter emission rates and hours of operation) please contact me at (813) 626-6151. Please note that the revised requested lead and particulate matter emission rates and hours of operation are those that are currently allowed in the Lead RACT permit. Gulf Coast is simply withdrawing its previous request for lower emission rates and increased hours of operation.

Sincerely,

GULF COAST RECYCLING, INC.

wielo m. Kitchen

Willis M. Kitchen President

WMK:lgc Attachments

460.2.1

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L. Deken, HCEPC-Faxed B. Thomas, SWD EPA NPS



M. A. INDUSTRIES, INC.

Quality Products Through Creative Research

orig: GT CC: WMK

December 4, 1995

Mr. George-Townsend Gulf Coast Recycling, Inc. 1901 North 66th Street Tampa, FL 33619

Dear George,

As we discussed on the telephone earlier this afternoon, I have done some research and have concluded that the total sulfur content you could expect in your lead paste would be on average 11/2 % by weight. This figure is based on the paste not being repulped (mixing the paste back with water to release any free sulfur and running it again through a filter press).

If the paste is repulped I would estimate that your total suffur content would be in the range of 1/2 - 1 % by weight.

If I can be of any further assistance to you or answer any questions please feel free to contact me.

Best Regards,

M.A. INDUSTRIES, INC.

Engineering Division

Ronald R. Egan

Marketing Manager

SECONDARY LEAD EXISTING FACILITIES - GENERAL FACILITY DATA WITH DEFAULTS (GEN_E.WK1)

Capacity		Total Area (m^2)	ST	City	Facility Name	Fac ID
108862	N		AL	TROY	SANDERS LEAD CO., INC.	2
124495	N		CA	VERNON	GNB INCORPORATED	3
	N		CA	CITY OF INDUSTRY	QUEMETCO INC RSR	4
29491	N		${ t FL}$	TAMPA	GULF COAST RECYCLING, INC.	5
16878	N		GA	COLUMBUS	GNB INCORPORATED	6
	Y		IN	MUNCIE	EXIDE CORPORATION	8
27222	N		IN	BEECH GROVE	REFINED METALS CORPORATION	9
	N		IN	INDIANAPOLIS	QUEMETCO INC.	10
8167	N		LA	PONCHATOULA	DELATTE METALS, INC.	12
99814	И		LA	BATON ROUGE	SCHUYLKILL METALS CORPORATION	13
90718	Y		MN	EAGAN	GOPHER SMELTING & REFINING CO.	14
81646	N		MO	BOSS	THE DOE RUN COMPANY	15
36296	N	155264	MO	FOREST CITY	SCHUYLKILL METALS CORPORATION	16
	N		NY	MIDDLETOWN	RSR CORPORATION	17
	N		ОН	CLEVELAND	MASTER METALS, INC.	19
16329	Y	4181	ОН	NORWALK	PBX, INC.	20
81144	Y		PA	LYON STATION	EAST PENN MANUFACTURING CO., INC.	22
	И		PA	READING	EXIDE CORPORATION	23
22680	N		TN	COLLEGE GROVE	GENERAL SMELTING & REFINING, INC.	25
27222	N		TN	MEMPHIS	REFINED METALS CORPORATION	26
A CONTRACTOR	N		TN	ROSSVILLE	ROSS METALS, INC.	27
45359	N		ТX	FRISCO	GNB INCORPORATED	28
22685	Y	3995	ТX	TERRELL	TEJAS RESOURCES, INC.	29

Fac Princip ID Bottlene	Hours of oal Oper eck (hr/yr)	Actual Lead Prod Rate (Mg/yr)	Paste Desulf (Y/N)	No. Blast Furns	No. Reverb Furns	No. Rotary Furns	No. Elect Furns
·° ; 52	8760	81588	N	4	0	0	0
- 3	8232	124495	Y	1	1	0	0
~ 4			Y	0	1	0	. 0
5	7800	19169	N	1	0	0	0
6	8760	12649	N Des	.1f. 2	0	. 0	0
– 8			Y 060	1	1	0	0
9 BLAST FU	JRN 8760	21778	NSCr	phase 1	0	0 .	0
10			Y	- 0	1	0	1
12 SCRAP AVA	AIL 8064	6805	N	1	0	0	0 .
13	8760	74807	N	2	1	0	0
14 NO	ONE 8760	54432	Y	1	2	. 0	0
15	8760	54431	Y	_ 1	1	1	0
-16	8760	33112	N	1	0	0	0
17	70 50		N	0	1	0	0
19	(A) (A)		N	0	0	2	0
-20	8760	12238	Y	0	0	1	0
-22	8760	60814	N	1	1	0	0
-23	11-2-1		N	2	2	. 0	0
25 REFINI	ING 6720	16330	N	1	0	0	0
26 BLA		23592	N	1	1	0	0
27ir			N	2	0	0	0
-28	8760	33995	N	1	. 1	0	. 0
-29	8760	17002	И	0	0	2	0

Table 2.1 PSD APPLICABILITY FOR NEW BLAST FURNACE

values are in tons/yr at 7,800 hrs/yr

POLLUTANT	NEW FURNACE POTENTIAL EMISSIONS	OLD FURNACE ACTUAL EMISSIONS	POTENTIAL EMISSIONS INCREASE	PSD SIGNIFICANCE LEVEL	PSD TRIP?	EMISSION REDUCTION W/CONTROLS	PROPOSED ALLOWABLE EMISSIONS
SO ₂	2,028.00¹	1,387.00	641.00	40	YES	1,345.50	682.50 ⁸
Pb	7.06 ²	6.69	0.37	0.6	NO		7.06
PM	20.43	9.51	10.89	15	NO		20.4
со	2,664.954	1,774.00	890.95	100	YES	2,398.466	266.49
NO _x	7.724	5.14	2.58	40	NO		7.72
VOCs	129.044	85.91	43.18	40	NA ⁵	122.64 ⁷	6.40

- 1 Based on AP-42 factor of 80 lbs/ton processed and requested production limit of 6.5 tons/hr
- 2 Based on current permitted rate of 1.810 lbs/hr
- 3 Based on current permitted rate of 20.4 tons/12 consecutive month period
- 4 Based on October 21/November 4, 1991 source tests
- 5 Tampa area classified as non-attainment for ozone at time of application; PSD not applicable
- 6 Based on a destruction efficiency of 90%
- 7 Based on a destruction efficiency of 95%
- 8 Based on the requested allowable emission rate of 175 lbs/hr

temperature of 700 oc (1,300 of). It controlled a stream with a volumetric flow rate of 160 dry standard cubic meters per minute (dscmm) [5,800 dry standard cubic feet per minute (dscfm)] and an uncontrolled THC concentration of about 3,000 to 3,500 parts per million by volume (ppmv), as propane. No information was available on the turbulence of the afterburner. This afterburner was typical of those controlling blast furnaces in this industry; three blast furnaces at other smelters are controlled by afterburners with equal or higher temperatures but shorter residence times and ten blast furnaces are controlled by afterburners with lower temperatures and equivalent or shorter residence The operating temperatures and residence times of the afterburners currently in use are summarized in table 3-6.

The results of the EPA testing at Schuylkill Metals are presented in table 3-5, above. During the second run, the temperature controller on the afterburner malfunctioned, causing a temperature drop and an increase in THC emissions. The average destruction efficiency of the afterburner during the first and third runs was 90 percent and the average outlet THC concentration was 296 ppmv in the first run and 364 ppmv in the third run, as propane, corrected to 4 percent CO2 for dilution. The average afterburner temperature was the same in the first and third runs [700 °C (1300 OF)] and there were no differences in furnace or afterburner operation during these two runs. 20-percent difference in THC concentration appears to be representative of normal variation in outlet THC concentration from a blast furnace controlled by this technology.

The highest reported afterburner temperature in use by a secondary lead smelter is 870 °C (1,600 °F) and the residence time of this unit is 1.5 seconds. No emissions data are available for this unit; however, previous EPA studies have demonstrated that the destruction efficiency of

TABLE 3-6. OPERATING TEMPERATURES AND RESIDENCE TIMES FOR AFTERBURNERS CONTROLLING BLAST FURNACES AT SECONDARY LEAD SMELTERS

Facility ID	Furnace ID	Operating temperature (°C)	Residence time (seconds)
2	1 2 3 4	670 670 670 670	N/A ^a N/A N/A N/A
3	1	650	N/A
6	1 2	730 730	0.7 0.7
8	1	650	N/A
12	1	870	1:5
13	1 2	590 _. 590	2.5
16	1	700	2.5
27	1	590	N/A
<u> </u>	1	650	2.0

a N/A = Residence time not available.

an afterburner operated at 870 oc and a residence time of 0.7 seconds is 98 percent. 27 Based on an uncontrolled THC concentration of 3,500 ppmv, the predicted outlet THC concentration from a blast furnace controlled with an afterburner at 870 °C would be 70 ppmv.

In summary, the data available to the EPA indicate that afterburners controlling organic HAP emissions from blast furnaces are capable of achieving outlet THC concentrations of 70 to 360 ppmv, depending on temperature and residence time. These outlet THC concentrations correspond to organic HAP destruction efficiencies of 98 and 90 percent, respectively, and are achievable by afterburners currently in use in the secondary lead industry.

3.1.2.2 <u>Gas Stream Blending</u>. Where blast furnaces are collocated with reverberatory furnaces, gas stream blending is an efficient option for controlling organic HAP emissions. In this technology, the blast furnace exhaust, which is a relatively cool and low-volume emission stream, is combined with the larger-volume and hotter exhaust from the reverberatory furnace. The organic compounds present in the blast furnace exhaust are combusted by the heat and turbulence of the reverberatory exhaust. Important design and operating parameters in gas stream blending are the same as those for afterburners: temperature, residence time, and turbulence.

To evaluate the performance of gas stream blending in controlling smelting furnace organic HAP emissions, the EPA measured THC emissions from the combined blast and reverberatory furnaces at East Penn Manufacturing Company. The system tested by the EPA consisted of a blast furnace with a volumetric flow rate of 110 dscmm (3,900 dscfm) and a reverberatory furnace with a volumetric flow rate of 570 dscmm (20,000 dscfm). The streams were combined and vented to a mixing chamber with a retention time of 2.5 seconds. The average temperature of the combined stream at the inlet to the mixing chamber was 790 °C (1460 °F).

Raytheon Engineers & Constructors

P.O. Box 31317 501 East Kennedy Blvd. Tampa, Florida

SPECIFICATION INDEX

FOR

<u>AFTERBURNER</u>

ITEM NO. HF-101A/B (Includes PB-101A/B)

AFTERBURNER PROJECT

TAMPA, FLORIDA

						Interdiscipline Reviews					
			•			Process	Mech.	Struct.	Elect.	hetr.	
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AFTERBURNERS

1.0 PROCESS DESCRIPTION

Afterburners are to be installed in an afterburner chamber (chamber by others) for the purpose of heating smelter exhaust gases and oxidation of carbon monoxide.

Inlet gases to Afterburner may fluctuate in temperature from 565°F to 1450°F depending on the smelter cycle. Afterburners are required to provide heat and combustion air to raise smelter gases to 1500°F with additional combustion air for oxidation of up to 700 lb/hr carbon monoxide.

Two 3.75 MMBTU/HR burners shall be provided for mounting on the side wall of the afterburner chamber. Vendor shall indicate optimum mounting location of burners for destruction of carbon monoxide and control of temperature. Afterburner dimensions are shown on pages 7 and 8.

2.0 SCOPE OF WORK

- 2.1 The Afterburners shall be furnished by the Vendor as a complete integrated unit with all burner instrumentation and valves from the first (upstream) block valve. Shut-off valves to both burners (including main and pilot) shall also be included.
- 2.2 Automatic control of the unit shall be accomplished by a local control panel furnished by the vendor.
- 2.3 The control system shall be designed to comply with Factory Insurance Association, U.S.A., Standards.
- 2.4 The unit shall include, but not be limited to, the following:
 - 2.4.1 Fuel Pressure Reducing Stations.
 - 2.4.2 <u>Fuel Pressure Switches</u> shall be furnished in NEMA 4 enclosure cases with external adjustments.
 - 2.4.3 <u>Fuel Temperature Switches</u> shall be furnished in NEMA 4 enclosure cases, capillary and bulb shall be stainless steel. Each switch shall be furnished with a stainless steel thermowell.
 - 2.4.4 Main Fuel, Pilot and Vent Solenoid Valves shall be furnished with 120 volt A.C. molded coils in NEMA 4 housings. Solenoids shall be furnished complete with all accessory items; i.e., latches and end switches.

RAYTHEON ENGINEERS	ISSUE	DATE		,	
& CONSTRUCTORS	1 1	12/15/95	SHEET 2	OF ₁₁	SP-73910201-HF101

4.0 GENERAL

- 4.1 Direct drive shall be utilized for the combustion air fan. The motor will be 460-volt, 3-phase, 60 Hertz, 3600 rpm, TEFC motor.
- 4.2 The unit is to be designed to meet all applicable ANSI codes. The vendor is completely responsible for this requirement and any violations of code requirements at the time of start-up will be the vendor's responsibility.
- 4.3 Vendor to provide separate cost for field installation and start-up services.
- 4.4 Maximum noise level for the system shall be 85dBA.
- 4.5 Vendor shall furnish instrumentation diagram with complete control schematic and interconnecting wiring diagrams with his drawing submittal.
- 4.6 Vendor to complete the attached data sheets for the Combustion Fans PB-101A/B and return with his drawing submittal.
- 4.7 Vendor to estimate the CO destruction efficiency based on continuous operation of afterburner chamber at 1500°F and stated dimensions and flow rates.

SPECIFICATION FOR AFTERBURNER

Service: Provide heat for oxidation of carbon monoxide in

exhaust gases of a Secondary Lead Smelter.

Tag Number(s): <u>HF-101 A/B</u> Number Required: <u>Two (2)</u>

GENERAL

Afterburners are to be installed in an Afterburner Chamber (chamber by others) for the purpose of heating smelter exhaust gases and oxidation of carbon monoxide. Vendor shall provide two (2) natural gas burners with separate blowers, prepackaged gas train, instrumentation, and controls for a fully automatic system according to the following specification.

OPERATING CONDITIONS
Heat Release: 3.75 MMBTU/Hr max (each burner)
Exhaust Gas to Afterburner Chamber: 32,511 ACFM 565 °F (Design) 1450 °F (Max)
Afterburner Chamber Operating Pressure:2 to +2 in. W.G.
Fuel Gas: Natural Gas HV: 870 - 1000 BTU/Ft3
Burner Pressure: 16 in. WG (max)
Fuel For Pilot: <u>Natural Gas</u>
Fuel Supply Pressure: psig
Plant Air: , psig
Remarks:

Raytheon .	ISSUE	DATE	SHEET		60.770
Engineers & Constructors	! _ ! _ !	12/15/95	. 5)/	SP-73910201-HF101

MECHANICAL SPECIFICATIONS

Burner Turndown Ratio: 5:1
Pilot Burners: Required (X) Not Required ()
Ignitor: Required (X) Not Required ()
Flame Safeguard: Required (X) Not Required () Type: <u>Ultraviolet Light</u>
Pilot Flame Detector: Required (X) Not Required ()
Fuel/Air Control: Automatic (X) Manual ()
Insurance Regulations: FM () FIA ()
Remarks:
A EMPLOATED ON AND TO DAMA (2)
AFTERBURNER CHAMBER DATA (3)
Chamber Diameter: 120 inches ID Length: 19'-0"
Access Manhole: 9'-6" x 9'-0" door
Plate Material: Thickness:
Refractory - Type
Burner Mounting: Wall mounted to combustion chamber (1)
Control Cabinet: Wall mounted
Testing -Type: NEMA 4
Remarks: (1) Vendor to recommend location for burners on afterburner chamber for optimum temperature control and destruction of CO.
(2) Vendor to estimate the CO destruction efficiency based on continuous operation of after-burner chamber at 1500 °F and stated dimensions and flow rates.
(3) Chamber supplied by others. See pages 7 & 8.
_

DATE 12/15/95

ISSUE

SHEET OF

6

EP-73910001-45101

Raytheon

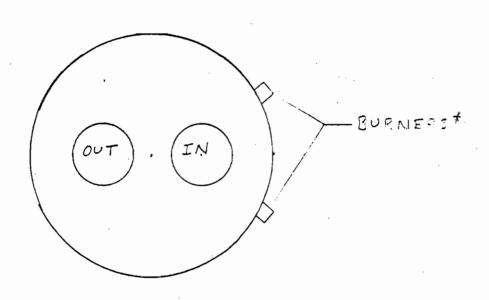
Engineers & Constructors

Raytheon GENERAL Engineers & Constructors COMPUTATION SHEET		CALCULATION SET NO. REV.				COMP. BY JWG DATE	CHK'D. B
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ROJECT <u>GULF COA:</u>		SHEET		OF 1/	-	DATE	DATE
		J.O. 7	3910.	201			
EXHAUST FROM SMELTE			√ To	BAG	Hous	ES	
	3'.0"	3'-0"					
				1	-		
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RaytheonEngineers & Constructors
GENERAL
COMPUTATION
SHEET

PROJECT GULF COAST REFINING
SUBJECT AFTER EURNER CHAMBER

CALCUI	LATION SE	T NO.	REV.	COMP. BY	CHK'D. BY	
PRELIM.	FINAL	VOID	,	DATE 12/11/95	DATE	
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J.O. 73	3910.	201				



* VENDOR TO SPECIFY LOCATION OF EURNERS
FOR OPTIMUM PERFORMANCE.

PLAN VIEW

BEST AVAILABLE COPY

1			FAN	/BLOWER	SPECIFICA	ATION	•	·
Clie	ent: GULF	COAST	RECYC	411/	Item No.:	PR-	101 1/8	
Uni	it:LEAD SA	MELTER	AFT	FRRUPNIE	P Location:	TAM	PA =1	
1	t: LEAD SA SERVICE: AFTE	RBURNER	COMPU	STIDAL ALE	FAN	NUMBER F	EQUIRED: TI	00 (7)
2	MANUFACTURER:	700,700,70		- 10/14 ///A	<u> </u>	MODEL:	, ,	
3				OPERATIN	G CONDITIONS			Each Machine
4	Fluid Handled:	AIR						<u> </u>
5								
6	Mol. wt.:	29		-				, · · <u>- · · · · · · · · · · · · · · · · </u>
7			Units		Normal		Rated	
8	Mass Flow		lbs/hr					
9	Capacity		acfm					
10	inlet Temperature		• F			9	5	
11	Inlet Pressure		inches W.C.				TM	.
12	Discharge Pressure		inches W.C.) /~	
13	Static Differential Pre	essure	inches W.C.	_				
14	Density		lbs/ cf					
15	Dewpoint		۰F			8.	-	
16	Dust Content		lbs/ cf				_	
17								
18	Location (Indoors/Ou	.tdoors): Tal	DOORS		Environment	(Dusty, Fume	s, etc.): DUS	
19		EA LEV		,	Atmospheric		001	
20	Ambient Temperature		95	_	Relative Hum	-	85	<u> </u>
21					Dust Charact		0 3	
22	Electrical Area Classi Minimum Cold Start 1		<u> </u>	1.F/ = V	Number Star		4	
23	Duty Continuou		uittent:				-7	
24		 		MATERIAI S	OF CONSTRUC	TION		
25	Contact Cought that I I I I I I I I I I I I I I I I I I I	Materi		Thickness		* * * * * * * * * * * * * * * * * * * *	Material	Thickness
26	Casing:	CARBON			Shaft:			
27	Casing Liner:	CAREDN	3/7/4		Shaft Sleeve			
28	Inlet Boxes:				Shaft Seals:	•		
29	Wheel/Impeller:	CARECH .	cT== 1		Inlet Vanes/D	Damper:		
30	Blades:				Outlet Vanes			
31	Hub:	CARBON.	STEEL		Spray Nozzie			
32	Gaskats:	•			Spray Piping	-	 -	-
33	Silencer:				Spray riping			
34				STATED		L ∓alkas#n		
35	Proposal Curve Num		2.22	- INTIED		_	Nower Shaft Hp - No	
36	Number Stages:				FOWEI ADM	J1000 @ 1 01/12		eted:
37	Rev./minute:							eximum:
38					Miles of Tile 6	Canad Iftiminu	_	
	Rated Capacity acfm		10	L - W C \-		Speed (ft/minu		
39	Rated Static Differen					I Speed (rpm):		
40	Maximum Rated Stati		ure (inches W.C			-	rating Speed (rpm):	
41	Fan/Blower Efficiency	75:			Impeller/81	ade Resonant	Frequency (rpm):	
1					_			
42	Inlet Velocity (ft/ min					quired/Not Red	quired:	
43	Discharge Velocity (ft/ min.):			- Su	pplied By:	quired:	
43		ft/ min.):			- Su		quired:	
43 44 45	Discharge Velocity (ft/ min.): ure(°F):			- Su	pplied By:		

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FAN/BLOWER SPECIFICATION Client: GULF COAST RECYCLING Item No.: PE-101 A/E Unit: LEAD SMELTER AFTERBURNER TAMPA, FL Location: 1 MECHANICAL SPECIFICATION SCOPE OF SUPPLY Nozzies Rating Facing Location Purchaser Vendor 3 inlet Discharge Driver Slide Rails 5 Case Drain Gearbox \Box 6 Spray Nozzle \Box Gearbox or Fan Input Coupling 7 Gearbox Output Coupling \Box \Box R Type (Centrifugal or Axial): Belt Drive 9 Construction (Spark Resistant &/or Gas Tight): **Guards to OSHA Specifications** 10 Discharge Designation: Turning Gear 11 Drive Arrangement: Locking Gear Standard Motor Position: Anti-vibration Mounting П 13 Blade Shape (Straight Radial, Forward Curved, Backward Curved or Airfoil): Raseplate 14 Soleplate 15 Wheel Fabrication: Anchor Bolts Wheel Diameter & Tip Width: Inlet Screen 17 Inlet Filter Number of Blades: \Box 18 Attachment of Wheel to Shaft: Inlet Silencer Shaft Diameter mm - @ Bearings: Inlet Louvers 20 - @ Wheel Hub; Inlet Demper \Box 21 Attachment Coupling to Shaft (Tapered or Cylindrical): Discharge Louvers 22 Casing Split (Axial or Radial): Discharge Damper П Inlet Louvers or Damper Operator 23 Casing Access Doors Number / Size : 24 Type Seal - Shaft to Casing: Outlet Louvers or Damper Operator Radial Bearing - Type / Size: Inlet Guide Vanes 25 26 Inlet Guide Vanes Actuator - Manufacturer: 27 Inlet Bellows Thrust Bearing - Type / Size: 28 - Manufacturer: Discharge Bellows \Box \Box Evase Design 29 Bearing Lubrication: Bearing Support (Bracket or Pedestal): Evase (If Required) П Discharge Silencer 31 Bearing Cooling (Air or Water)/Flow: 32 Heat Slinger/Shield Furnished: Spray Nozzles П 33 Balancing of Rotor Assembly (Static and/or Dynamic): Spray Nozzle Piping Acoustic Treatment Rotor Inertia : 36 Inlet Flow Control Operator Type: Insulation Clips 36 Outlet Flow Control Operator Type: Insulation 37 Number Spray Nozzies: Inlet & Discharge Gaskets 38 Painting: Vibration Probes 39 Vibration Proximeters 40 \Box Vibration Monitor System 41 Utilities Available and Required: Lubrication System - Vendor Standard 42 П PHASE 460 V RTD Temperature Detector on each Bearing 43 Grounding Lugs 44 45 **RAYTHEON ENGINEERS &** ISSUE: CONSTRUCTORS

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Client: (SULE COACE CEASE		ham No. 20 car 4/a				
Unit: 4 =	SULF COAST RECYCLI AD SMELTER AFTE	NG	Item No.: PE -101 A/B				
1	10 SMELTER AFTE	K BURNER					
201711-000-12	SHOP TESTS		INSTRUMENTATION				
	Witnessed	Test Code					
3 ☐ 4 ☐	Performance Mechanical Run						
<u>* </u>		 	-				
6 🗆							
} 			· · · · · · · · · · · · · · · · ·				
8 0		· ·	<u> </u>				
9	Balance	DRIVER SPEC	ICICATIONS				
	iciency %:	DHIVENSFEC					
11			Driver Slide Base Type: Heavy Duty with Jack Scraws				
	Mfg.:		Type:				
12 HO TOM	7		RPM:				
9	Enclosure:		Volts/Phase/Hertz:				
	Insulation Class / Service Factor:		Frame Size:				
16 V)	Supplied by:		Mounted By:				
♀	Gearbox or Fan Input - Mfr. & Size:		- Type:				
17 =	Gearbox Output - Mfr. & Size:		- Type:				
18 I	Motor Half Coupling Mounted By:		Gearbox or Fan Half Coupling Mounted By:				
	 		· · · · · · · · · · · · · · · · · · ·				
20 ×	Manufacturer:		Type:				
21 (0)	Size:		Ratio / Output RPM:				
EARBOX	Class:		Service Factor:				
<u>~</u> 5	Casing Material:		Type of Base:				
24	Lubricant Type:		Quantity / First Filled By:				
V-BELT DRIVE	Section:		No. of Belts:				
28 - 38	Service Factor:		Anti-static (Yes/No):				
	Pitch Dia Drive Pulley:		- Driven Pulley:				
28 Guard -	Color Maria Company of the Color of the Colo	· · · · · · · · · · · · · · · · · · ·	Location:				
29	SH	IIPPING AND INS	ALLATION DATA				
30 Net Wei	;ht :		Operating Weight:				
31 Shipping	Weight:		Shipping Volume :				
32 Weight o	of Heaviest Lift :		Number of Components:				
33	REFERENCE SPE	CIFICATIONS, D	RAWINGS AND DESIGN CODES				
34 Painting							
35 Electric	Motors:		<u> </u>				
36 Noise A	balement:						
37 Gearbox							
36 Other:	<u>;</u>						
39 % 3		REMA	RKS				
	or shall complete ALL data on this form and return fan/blower shall meet the requirements of Air Movi						
3. Vend	for shall ensure equipment complies with U.S. Dep		pational Safety and Health Adminstrattion Standards, Part 1910. Any				
4. The	ptions shall be clearly stated . fan/blower shall be fully assembled, balanced and	tested before shipmer	· t.				
- 6 Vend	ns shall be located in low points of the casing . for shall state in his quotation any exceptions to thi	is specification and all	referenced specifications.				
6. Vend	or error state in the quotation any exceptions to the	is specification and all					
45							
	HEON ENGINEERS &	SSUE: DATE	13/15/95 11 of 11 SP-739/0001-HF101				

TABLE 4-1. PROCESS SOURCE EMISSION CONTROLS IN USE AT SECONDARY LEAD SMELTERS

	.,	-		=
Facility ID	Smelting furna type (number		Production capacity (Mg/yr) ^a	Process emission controlsb
2	Blast (4)		110,000	Afterburner and baghouse
3	Reverberatory Blast (1)	(1)	120,000	Afterburner, baghouse, and SO ₂ scrubber
4	Reverberatory	(1)	70,000	Baghouse and SO ₂ scrubber
5	Blast (1)		30,000	Baghouse
6	Blast (2)		20,000	Afterburner and baghouse
8	Reverberatory Blast (1)	(1)	110,000	Combined flow, afterburner, baghouse, and SO ₂ scrubber
9 .	Blast (1)		30,000	Baghouse
10	Reverberatory Electric (1)	(1)	110,000	Baghouse
12	Blast (1)		10,000	Afterburner and baghouse
13	Reverberatory Blast (2)	(1)	100,000	Afterburner and baghouse
14	Reverberatory Blast (1)	(2)	90,000	Combined flow, afterburner, and baghouse
15	Reverberatory Blast (1)	(1)	80,000	Baghouse
16	Blast (1)		40,000	Afterburner, baghouse, and SO ₂ scrubber
17	Reverberatory	(.1)	70,000	Baghouse
19	Rotary (2)		30,000	Baghouse
20	Rotary (1)		20,000	Afterburner, baghouse, and 50g scrubber

TABLE 4-1. PROCESS SOURCE EMISSION CONTROLS IN USE AT SECONDARY LEAD SMELTERS (CONCLUDED)

	<u> </u>		
Facility ID	Smelting furnace type (number)	Production capacity (Mg/yr) a	Process emission controls ^b
22	Reverberatory (1) Blast (1)	80,000	Combined flow, afterburner, baghouse, and SO ₂ scrubber
23	Reverberatory (2) Blast (2)	100,000	Combined flow, afterburner, baghouse, and SO ₂ scrubber
25	Blast (1)	20,000	Baghouse
26	Reverberatory (1) Blast (1)	30,000	Baghouse ,
27	Blast (1)	20,000	Afterburner and baghouse
28	Reverberatory (1) Blast (1)	50,000	Afterburner, baghouse, and SO ₂ scrubber
. 29	Rotary (2)	20,000	Baghouse and SO ₂ scrubber

a Rounded to the nearest 10,000 Mg.

b Combined flow (i.e., gas stream blending) means that blast and reverberatory furnace exhaust are combined while reverberatory furnace exhaust is still hot in order to achieve control of organic compounds.



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

Virginia B. Wetherell Secretary

December 3, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

RE: November 26 Teleconference on Status of PSD-FL-215

Dear Mr. Kitchen:

This is intended to briefly summarize our telephone discussion last week with you, George Townsend, and Steve Smallwood regarding the innovative control technology approach for the blast furnace PSD permit.

We discussed the possibility of using an advanced desulfurization technique such as multi-stage repulping and refiltering of lead paste or another process with a design goal of about 98 percent sulfur removal. Gulf Coast Recycling expressed concern that site-specific economic factors be considered and then agreed to research available options and submit a report to the Department by January 2, 1997.

If questions arise please contact me, Al Linero or John Reynolds at (904) 488-1344.

Sincerely,

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/jr

c: B. Thomas, SWD

J. Campbell, EPCHC

B. Beals, EPA Region IV

S. Smallwood, P.E.

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Lawton Chiles Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee. Florida 32399-2400

Virginia B. Wetherell Secretary

July 25, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Re: Request for PSD Permit Processing as Innovative Control Technology

Dear Mr. Kitchen:

Today we received your July 22 letter requesting that the Department process your current PSD permit application (PSD-FL-215) under the provisions of Rule 212.400(3)(f)4., Florida Administrative Code. For reasons explained below, we do not believe that this rule will apply as you have described.

The innovative control technology rule provides for a temporary exclusion from increment consumption where a source's construction or modification would cause an exceedance of the maximum allowable increase in the ambient air concentration of a pollutant. This situation does not apply here because the innovative control technology must be a technology that has not been adequately demonstrated in practice. It must have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice, or comparable reduction at lower cost or energy consumption. These requirements are spelled out in 40 CFR 52.21(b)(19). The desulfurization process does not qualify as an innovative technology since it has been adequately demonstrated in practice and is not capable of achieving greater emissions reduction than any control system in current practice, such as a scrubber. Even a conventional scrubber would not qualify as innovative control technology since it has been adequately demonstrated.

The Department does not agree with your statement that BACT has been determined to be a minimum of 75% reduction of the SO₂ emission rate. As we stated in our July 16 letter, the Department is now in the process of gathering the information needed for determining BACT. The Environmental Protection Commission of Hillsborough County has contributed to and will continue to comment on the Department's BACT determination. However, the Department will have the main role in this regard.

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

2/1

A. A. Linero, P.E. Administrator

New Source Review Section

mero 7/25

AAL/JR

c: B. Thomas, SWD J. Campbell, EPCHC J. Harper, EPA J. Bunyak, NPS

on the reverse side?	• Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • Print your name and address on the reverse of this form so the return this card to you. • Attach this form to the front of the mailpiece, or on the back is does not permit. • Write "Return Receipt Requested" on the mailpiece below the article The Return Receipt will show to whom the article was delivered a delivered.	f space cle number.	I also wish to receive the following services (for an extra fee): 1.	eceipt Service.
you(RETURN ADDRESS completed	3. Article Addressed to: Willio M. Kutchen, Pres. Muly Coast Recycling, Drc. 1901 N. 66th St. Tampa, F1 33619 5. Signature (Addressee) 6. Signature (Agent) PS Form 3811, December 1991 *U.S. GPO: 1993—352	4b. Ser Regis Certi Expr. 7. Date 8. Addi	vice Type stered Insured ified COD ess Mail Return Receipt for Merchandise of Delivery ressee's Address (Only if requested fee is paid)	Than
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Lawton Chiles Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 June 11, 1996

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

Re: Construction Permit Application (PSD-FL-215)

Dear Mr. Kitchen:

On March 15, the Department received a response to our letter of February 8 requesting additional information related to the subject application. On March 28, representatives of the Department met with George Townsend of your company together with Larry Carlson of Lake Engineering, Bill Taylor, Esq., and Steve Smallwood of ERM-South.

It was agreed that Gulf Coast Recycling (GCR) would subsequently provide to the Department more concise and complete answers to our February 8 letter and also provide to the Hillsborough County Environmental Protection Commission (HCEPC) some additional details on the selection of the desulfurization system. So far, we have received a copy of the submittal to HCEPC but not the update of your March 15 letter.

This is to clarify that the permit application remains incomplete until we receive the update and that we do not have sufficient information to process it. It is important that the information requested be submitted soon. A complete permit application is required based on the 1991 EPA-approved consent order between GCR and HCEPC.

If there are any questions about what was expected based on the March 28 meeting or on anything else related to this matter, please call Mr. A. A. Linero at (904) 488-1344.

Sincerely,

C. H. Fancy, Chief

Bureau of Air Regulation

cc: J. Harper, EPA

J. Bunyak, NPS

I. Choronenko, HCEPC

J. Campbell, HCEPC

J. Pennington, DEP

D. Beason, DEP

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P 339 251 102

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

Virginia B. Wetherell Secretary

July 16, 1996

CERTIFIED MAIL- RETURN RECEIPT REQUESTED

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

RE: Construction Permit Application PSD-FL-215

Dear Mr. Kitchen:

We received your June 24 letter in response to our June 11 letter requesting the additional information needed to complete the referenced application. The response appears to be a restatement of Gulf Coast Recycling's position set forth in your March 15 letter. We were unable to find anything new in it except for your request that the Department process the permit based on the information submitted to date.

In view of the history of this application, we will attempt to do this by completing the research and data gathering ourselves without requesting anything further from Gulf Coast. However, please be aware that the application will not be deemed complete until we have the needed information in hand. At that time we will notify you that the application is complete and that the permit processing clock has started.

In the meantime, if questions arise you may 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
 - L. Deken, EPCHC
 - J. Harper, EPA
 - J. Bunyak, NPS
 - S. Smallwood, ERM-South

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