

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

Is your RETURN ADDRESS completed on the reverse side?

SENDER: • 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 that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece below the article number. • The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Willis M. Kitchen Pres. Gulf Coast Recycling 19010 N. 66th St. Tampa, FL 33619		4a. Article Number Z127 632 578	
		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
		7. Date of Delivery 11-24-95	
5. Signature (Addressee)		8. Addressee's Address (Only if requested and fee is paid)	
6. Signature (Agent) Gwen Phillips			

Thank you for using Return Receipt Service.

Z 127 632 578



Receipt for Certified Mail
 No Insurance Coverage Provided
 Do not use for International Mail
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Sent to		Willis M. Kitchen	
Street and No.		Gulf Coast	
City, State and ZIP Code		Tampa FL	
Postage	\$		
Certified Fee			
Special Delivery Fee			
Restricted Delivery Fee			
Return Receipt Showing to Whom & Date Delivered			
Return Receipt Showing to Whom, Date, and Addressee's Address			
TOTAL Postage & Fees	\$		
Postmark or Date		11-22-95	
PSO-F1 215			

PS Form 3800, March 1993



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

November 8, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Re: Completeness Review - Construction Permit Application
PSD-FL-215

Dear Mr. Kitchen:

The Department received your additional submittal regarding the subject permit application on October 27. Since that submittal may impact the overall review of the application, the completeness review period will be extended for 30 days following October 27. Therefore, if the Department requires any additional information, an incompleteness letter will be mailed to you by November 24.

If you have any questions, please call me or John Reynolds at 904-488-1344.

Sincerely,

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

AAL/JR/t

CC: L. Deken, EPCHC
W. Thomas, SWD
L. Carlson, Lake Engineering

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Is your RETURN ADDRESS completed on the reverse side?

SENDER: <ul style="list-style-type: none"> • 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 that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece below the article number. • The Return Receipt will show to whom the article was delivered and the date delivered. 		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Willis M. Kitchen, Pres. Gulf Coast Recycling 1901 N. 66th St. Tampa, FL 33619		4a. Article Number 2127632566	
		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
		7. Date of Delivery 11-10-95	
5. Signature (Addressee) Sammie Thompson		8. Addressee's Address (Only if requested and fee is paid)	
6. Signature (Agent)			

Thank you for using Return Receipt Service.

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714 DOMESTIC RETURN RECEIPT

2 127 632 566



Receipt for Certified Mail
 No Insurance Coverage Provided
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 (See Reverse)

Sent to		Willis Kitchen	
Street and No.		Gulf Coast Recy.	
City, State and ZIP Code		Tampa, FL	
Postage	\$		
Certified Fee			
Special Delivery Fee			
Restricted Delivery Fee			
Return Receipt Showing to Whom & Date Delivered			
Return Receipt Showing to Whom, Date, and Addressee's Address			
TOTAL Postage & Fees	\$		
Postmark or Date	11-8-95	PSD-FI-215	

PS Form 3800, March 1993

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department 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 intent in the Office of General Counsel at the above address of the Department. 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 28-5.207, F.A.C.

The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive
Tallahassee, Florida 32301

Department of Environmental Protection
Southwest District
8407 Laurel Fair Circle
Tampa, Florida 33619

Environmental Protection Commission
of Hillsborough County
1900 9th Avenue
Tampa, Florida 33605

Any person may send written comments on the proposed action to Administrator, New Source Review Section, Bureau of Air Regulation, at the Department's Tallahassee address. All comments received within 30 days of the publication of this notice will be considered.

Further, a public hearing can be requested by any person(s). Such requests must be submitted within 30 days of this notice.

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

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

Consult postmaster for fee.

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

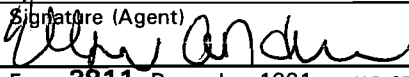
4a. Article Number
 Z 127 632 517

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

7. Date of Delivery
 9/14/95

5. Signature (Addressee)

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

6. Signature (Agent)


PS Form 3811, December 1991 *U.S. GPO: 1993-352-714

DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

Z 127 632 517



Receipt for Certified Mail

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

Sent to Willis M. Ketchum	
Street and No. Gulf Coast Recyng.	
City, State and Zip Code Tampa, FL	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date AC 29-209018 9-12-95 PSD-FI-215	

PS Form 3800, March 1993

8-28-95

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION) ② H. John Reynolds

~~2. David Cliff~~ ~~5. Tito~~

~~3. Steve Holladay~~ ~~1. At~~

- PLEASE PREPARE REPLY FOR:
- SECRETARY'S SIGNATURE
 - DIV/DIST DIR SIGNATURE
 - MY SIGNATURE
 - YOUR SIGNATURE
 - DUE DATE _____
- ACTION/DISPOSITION
- DISCUSS WITH ME
 - COMMENTS/ADVISE
 - REVIEW AND RETURN
 - SET UP MEETING
 - FOR YOUR INFORMATION
 - HANDLE APPROPRIATELY
 - INITIAL AND FORWARD
 - SHARE WITH STAFF
 - FOR YOUR FILES

COMMENTS:

~~Please let me know who is really handling this project.~~

~~Thank you,~~

~~① Kancare~~

~~- Any idea if Clair signed a denial to these guys? NO~~

② John Reynolds

Did you change date on denial and give to Clair?

FROM: Kancon/Winn DATE: 8 Sept 95 PHONE: 19535



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

April 20, 1995

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 for Blast Furnace
AC29-209018/PSD-FL-215

Dear Mr. Kitchen:

The Department has not received a reply to our June 28, 1994, letter requesting additional information for processing the referenced permit application. Therefore, the permit will be denied unless the Department receives the requested information by May 26, 1995. If there are any questions, please call Al Linero or John Reynolds of our staff at 904-488-1344.

Sincerely,

Al Linero 4/20
for C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/AL/t

cc: W. Thomas, SWD
D. Beason, OGC
L. Deken, EPCHC
J. Harper, EPA
J. Bunyak, NPS
L. Carlson, Lake Eng.

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

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

Consult postmaster for fee.

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

4a. Article Number
 Z 311 902 917

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

7. Date of Delivery
 4-24-95

5. Signature (Addressee)
 [Signature]

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

6. Signature (Agent)

Thank you for using Return Receipt Service.

Z 311 902 917



Receipt for Certified Mail

No Insurance Coverage Provided
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PS Form 3800, March 1993

Sent to	Willis Kitchen
Street and No.	Gulf Coast Recy.
P.O., State and ZIP Code	Tampa, FL
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	4-20-95 AC 29-209018/PSD FI-215



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

April 20, 1995

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 for Blast Furnace
AC29-209018/PSD-FL-215

Dear Mr. Kitchen:

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Sincerely,

Al Linero 4/20
for C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/AL/t

cc: W. Thomas, SWD
D. Beason, OGC
L. Deken, EPCHC
J. Harper, EPA
J. Bunyak, NPS
L. Carlson, Lake Eng.

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- 2. Restricted Delivery

Consult postmaster for fee.

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

4a. Article Number
 Z 311 902 917

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

7. Date of Delivery
 4-24-95

5. Signature (Addressee)
 [Signature]

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

6. Signature (Agent)
 [Signature]

Thank you for using Return Receipt Service.

Z 311 902 917



Receipt for Certified Mail

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 (See Reverse)

PS Form 3800, March 1993

Sent to	Willis Kitchen	
Street and No.	Gulf Coast Recycl.	
P.O., State and ZIP Code	Tampa, FL	
Postage	\$	
Certified Fee		
Special Delivery Fee		
Restricted Delivery Fee		
Return Receipt Showing to Whom & Date Delivered		
Return Receipt Showing to Whom, Date, and Addressee's Address		
TOTAL Postage & Fees	\$	
Postmark or Date	4-20-95 AC 29-209018 1150 FL-215	

MACFARLANE AUSLEY FERGUSON & McMULLEN

al ✓
John R ✓

ATTORNEYS AND COUNSELORS AT LAW

111 MADISON STREET, SUITE 2300
P.O. BOX 1531 (ZIP 33601)
TAMPA, FLORIDA 33602
(813) 273-4200 FAX (813) 273-4396

227 SOUTH CALHOUN STREET
P.O. BOX 391 (ZIP 32302)
TALLAHASSEE, FLORIDA 32301
(904) 224-9115 FAX (904) 222-7560

400 CLEVELAND STREET
P. O. BOX 1669 (ZIP 34617)
CLEARWATER, FLORIDA 34615
TEL: 441-8966 FAX (813) 442-8470

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DEC 13 1995

BUREAU OF
AIR REGULATION

William B. Taylor, IV
Post Office Box 1531
Tampa, Florida 33601

IN REPLY REFER TO:

December 11, 1995

VIA FEDERAL EXPRESS

Ms. Virginia Wetherell
Secretary
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399

Re: Gulf Coast Recycling, Inc.
DEP File No.: PSD-FL-215
AC 29-209018

Dear Ms. Wetherell:

Enclosed for filing is the original and one copy of Gulf Coast Recycling, Inc.'s Third Request for Extention of Time to File its formal Petition For Administrative Hearing. Please date stamp the copy and return it to my office in the enclosed, self-addressed, stamped envelope. Thank you.

Sincerely,

Signed in Mr. Taylor's absence
to avoid delay in mailing.

William B. Taylor, IV

WBT:kkb
Enclosures
cc: Mr. Willis Kitchen

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^s Kitchen
President
Gulf Coast Recycling, Inc.

THIRD REQUEST FOR EXTENSION OF TIME

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 third 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. Since that time Gulf Coast has been in communication with its consultant retained to advise it regarding the permit application and to respond to an information request submitted by the Department dated November 21, 1995 by A. A. Linero, P.E., Administrator, New Source Review Section. The consultant advises that the necessary information should be given to Gulf Coast by December 24, 1995. It will take approximately two (2) weeks to review that information and compile a responsive document. Therefore, an extension until February 1, 1996 is requested.

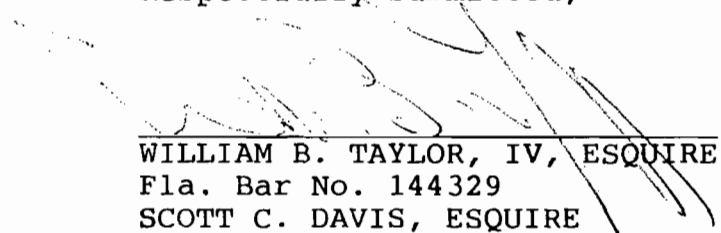
Best Available Copy

2. In the event this request for extension is not granted, then this shall serve as notice of intent by Gulf Coast to seek a formal administrative review pursuant to Section 120.57, Florida Statutes.

WHEREFORE, Gulf Coast respectfully requests an extension of time until February 1, 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 11th day of December, 1995.

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.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
1875 Century Boulevard
Atlanta, Georgia 30345

NOV 28 1995

RECEIVED

DEC 4 1995

BUREAU OF
AIR REGULATION

IN REPLY REFER TO:

Mr. Clair H. Fancy
Chief, Bureau of Air Regulation
Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399

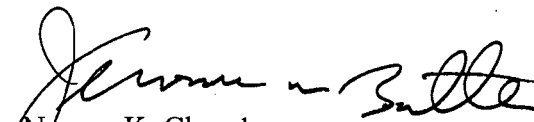
Dear Mr. Fancy:

We have reviewed the October 10, 1995, letter from Gulf Coast Recycling, Inc., to your office, in which Gulf Coast addresses concerns we expressed in a July 13, 1994, letter to you. We are pleased that Gulf Coast has proposed a substantially lower sulfur dioxide emission rate (175 lb/hr instead of the originally proposed 374 lb/hr), but still have some concerns regarding the project. The enclosed Technical Review Document prepared by our Air Quality Branch in Denver, Colorado, summarizes these concerns.

We understand that your office has advised Gulf Coast that their application remains incomplete, and you have requested additional information to satisfy our concerns.

If you have any further questions, please contact Ms. Ellen Porter of our Air Quality Branch in Denver at 303/969-2617.

Sincerely yours,


For Noreen K. Clough
Regional Director

Enclosure

**Technical Review of the
Additional Information
Submitted October 10, 1995,
by Gulf Coast Recycling, Inc.
Hillsborough County, Florida**

by

Air Quality Branch, U.S. Fish and Wildlife Service, Denver, Colorado

On October 10, 1995, Gulf Coast Recycling, Inc. (Gulf Coast), submitted responses to concerns expressed in our July 13, 1994, letter. In that letter, we informed the Florida Department of Environmental Protection (FDEP) that Gulf Coast's Prevention of Significant Deterioration (PSD) permit application was incomplete. The application was for a blast furnace at the Gulf Coast lead-acid battery recycling facility in Tampa, Hillsborough County, Florida, 75 km south-southeast of Chassahowitzka Wilderness Area (WA). Although the blast furnace was actually installed in 1984, Gulf Coast did not apply for a PSD permit then. FDEP subsequently informed Gulf Coast that a PSD review was required, and Gulf Coast submitted an application in 1994.

The following comments summarize our position regarding Gulf Coast's responses to the concerns expressed in our July 13, 1994, letter.

Best Available Control Technology (BACT)

Our July 13, 1994, letter noted that the best available control technology (BACT) analysis for the project was incomplete and that similar facilities had achieved substantially lower sulfur dioxide (SO₂) emission rates than those initially proposed by Gulf Coast. We are pleased that Gulf Coast is now proposing a much lower SO₂ emission rate: 175 pounds per hour (lb/hr) instead of 374 lb/hr. However, Gulf Coast has still not provided adequate information to determine whether the proposed level of control represents BACT.

Also, Gulf Coast has not adequately addressed our concerns regarding their proposed lead emission rates. Source testing indicates actual lead emissions are far below the requested emission limit of 0.59 ton per year. We request that FDEP establish an emission limit more representative of actual rates, as opposed to an artificially high limit. If FDEP sets a limit of 0.59 ton per year, we agree the Maximum Achievable Control Technology (MACT) standard procedures for monitoring lead emissions are sufficient to ensure lead emissions do not exceed the PSD threshold; however, we request that FDEP not wait until the MACT compliance date to require monitoring. The monitoring procedures must be in place before the MACT compliance date to ensure the 0.59 ton per year emission limit is enforceable.

Air Quality Modeling Analysis

We noted that although the MESOPUFF II air quality modeling analysis predicted that Gulf Coast would not contribute significantly to exceedances of the Class I SO₂ 24-hour increment, the analysis was not complete because it used only one upper air meteorological station. Therefore, we requested that Gulf Coast be required to use two additional upper air stations to adequately address the wind flow from other sources within the State. Because Gulf Coast has now proposed a substantially lower SO₂ emission rate, we will accept the initial modeling analysis (which was based on the much higher emission rate of 374 lb/hr SO₂). However, future applicants should use three upper air stations when evaluating potential impacts to Chassahowitzka WA: Tampa/Ruskin, Florida; West Palm Beach, Florida; and Waycross, Georgia.

Air Quality Related Values (AQRV) Analysis

We requested a more detailed air quality related values (AQRV) analysis. Gulf Coast replied by stating that because they do not significantly contribute to any modeled exceedance of the Class I increments, impacts on AQRVs are insignificant. Please advise Gulf Coast that the AQRV analysis is independent of the Class I increment analysis. AQRVs may be affected even though the increment is not exceeded. Because Gulf Coast has reduced proposed emissions significantly, we will not require them to submit another analysis. However, future applicants should consult with our office regarding any question of the need for a detailed AQRV analysis.

VISCREEN Analysis

We originally noted that Gulf Coast did not perform a visibility analysis. However, we are now satisfied that Gulf Coast has submitted this analysis, which indicates that the project will have low potential to cause visible plume impacts at Chassahowitzka WA.

Contact: Ellen Porter
(303) 969-2617



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
November 21, 1995

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:

Additional information will be required for processing the revised application. As you know, this permitting action began as an effort to permit the 1984 replacement of two blast furnaces retroactively according to federal PSD requirements, on the assumption that no major modifications or physical changes were being made in the interim. Recently, the application was amended to cover higher production and emission rates and now contains the newly-proposed desulfurization and afterburner projects. Although the revised application mentions that a subsequent application will be filed once a specific system is selected, these projects must undergo permitting review at this time since Gulf Coast has proposed emission limits based on their installation. Thus, the construction permit must cover these projects as if they were being installed concurrently with the blast furnace replacement.

We should also point out that several sections of the revised application must be redone. For example, the "internal offset" approach discussed on page 25 as a way of avoiding ozone non-attainment new source review puts the "cart before the horse" since the "offset" from installing the project would be obtained before the unit undergoes permitting review. The process does not work that way. The incinerator installation must be the consequence of the permitting review process rather than vice versa.

In other words, Gulf Coast's existing emissions (before desulfurization and incineration are installed) must determine the type of review required, and the necessary controls are then determined based on the rules that apply to the current emission levels. For this reason, a Lowest Achievable Emission Rate (LAER) analysis is required pursuant to F.A.C. Rules 62-212.500(4)(a) and 62-212.510 for current VOC emissions in the ozone non-attainment area. This will mean that the incinerator must be designed to achieve a LAER emission limit, and that limit is to be determined by the Department, after being proposed by Gulf Coast.

Mr. Willis M. Kitchen
 November 21, 1995
 Page Two

Additional information will also be needed as a result of the EPA's 40 CFR 63 Subpart X standards promulgated on June 23, 1995. Although Gulf Coast will have until June 23, 1997 to comply with Subpart X requirements, they must be included in the construction permit at this time since they are presently applicable with two years for final compliance.

Therefore, the following incompleteness items are requested:

1. The SO2 emission limit proposed by Gulf Coast has been reduced to 175 lbs/hr from the previous 374 lbs/hr on the basis of installing desulfurization technology. The 175 lbs/hr estimate is based on a material balance calculation that assumes 80% of the feed is recovered as scrap lead that is then desulfurized, leaving 1% of the tonnage as sulfur (primarily in the form of lead sulfate) that oxidizes to SO2 in the furnace, with 20% of that 1% remaining in the furnace slag. It is not clear how the desulfurization step enters into this calculation. The 1% sulfur obtained as a result of the desulfurization step appears to be a rough estimate at best and may vary considerably. Rather than basing the SO2 emission limit on such broad assumptions, we must rely on actual data from installations using this technology. The application mentions three new lead recovery plants that have successfully demonstrated desulfurization, but does not identify them or present any data. To provide the Department with reasonable assurance that the proposed emission limit has a sound factual basis, please provide actual data for these three plants from the manufacturer or other sources as shown below:

<u>Plant</u>	<u>Location</u>	<u>Date Desulf. Installed</u>	<u>Charge Rate</u>	<u>Actual SO2 Emissions (pph)</u>	
				<u>Before Desulf.</u>	<u>After Desulf.</u>
-	-	-	-	-	-
-	-	-	-	-	-
-	-	-	-	-	-

2. The rationale for the particulate matter analysis (page 22) is incorrect since new source review applicability depends on a comparison of the proposed allowable emissions with the actual emissions averaged over the most recent two year period that is representative of normal operation. In this case the averaging period would be the two years prior to the replacement of the two blast furnaces in 1984. Please revise the application accordingly.

3. As stated earlier, a control strategy must be the result of permitting review based on current emissions and not "offsets" from a control strategy the applicant has proposed prior to permitting review. Thus, the VOC section must be redone to include a LAER analysis and a proposed LAER emission limit.

Mr. Willis M. Kitchen
November 21, 1995
Page Three

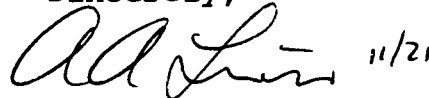
4. Please revise the application to cover all applicable provisions of the 40 CFR 63 Subpart X regulations and indicate a schedule for compliance by June 23, 1997.

5. Please address all concerns discussed and make revisions as necessary pursuant to the enclosed comments submitted by the Environmental Protection Commission of Hillsborough County on November 21, 1995.

6. We need a copy of the SO2 Maxi-File comparison programs and outputs to confirm your modeling results.

If you have any questions, please contact me, John Reynolds, or Cleve Holladay at 904-488-1344.

Sincerely,



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

Enclosure

cc: W. Thomas, SWD
L. Deken, EPCHC
J. Harper, EPA
J. Bunyak, NPS
L. Carlson, Lake Eng.

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

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

4a. Article Number
Z127 632 578

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

7. Date of Delivery
11-22-95

5. Signature (Addressee)

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

6. Signature (Agent)

Sven Phillips

PS Form 3811, December 1991 *U.S. GPO: 1993-352-714

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PS Form 3800, March 1993

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Street and No. <i>Gulf Coast</i>	
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Postage	\$
Certified Fee	
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Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
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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

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TELEPHONE (813) 272-7104

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BUREAU OF
AIR REGULATION

November 21, 1995

John Reynolds
Division of Air Resources Management
Florida Department of Environmental
Protection

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

Re: Gulf Coast Recycling, Inc. (GCR) - PSD Application

Dear Mr. Reynolds:

I have reviewed the revised application submitted by GCR on October 27, 1995. Based on my review of the material submitted, I have the following comments:

1. This facility's operations are subject to Rule 62-296.600, F.A.C. (Lead RACT) and GCR was required to obtain a federally enforceable permit to incorporate the applicable provisions. I am enclosing a copy of the permit for your information. In the revised PSD application they requested an emission limitation which is substantially different from what is required in their Lead RACT permit. The Lead RACT rule was not listed in the rule applicability portion of the application. This rule needs to be taken into account when establishing the allowables for the blast furnace operation.
2. In the application, the permittee also indicated that blast furnace operations are not subject to particulate matter RACT because of the exemption stated in Rule 62-296.700(2)a, F.A.C. (facility emissions less than 5 lbs./hr. and 15 tons/yr.). GCR's blast furnace existing operating permit does have the RACT exemption included as a specific condition. However, after the operating permit for the furnace was issued, the facility was required to obtain a construction permit for their refining operation. The construction permit was issued in Tallahassee and a determination was made that the operation was subject to particulate RACT. The particulate matter

emissions for the refining operation alone are more than 4 lbs./hr. and 12 tons/yr. The furnace operations therefore can't be exempted using the 5 lbs./hr. and 15 tons/yr. facility exemption. This issue needs to be addressed in this permit.

3. Also, in the construction permit that was issued to address the Lead RACT issues and their current operating permit, they currently charge 88% of the total maximum process rate as lead scrap. In the revised submittal all of the calculations were done for the SO₂ and CO based on charging 80% lead scrap. There seems to be a change in the ratio of the different materials charged. If they plan to reduce the lead scrap charge to 80%, which of the other constituents do they plan to increase (i.e., limestone, coke, iron, etc.)? If they plan to continue charging the furnace with the current ratio of lead scrap and other materials, then they need to revise their calculations to account for the increased charge (88%).
4. In a recent compliance test at the facility, GCR reported the process rate for the SO₂ test at 6.56 tons/hr. In the current revised application under review they have requested a maximum process rate of 6.5 tons/hr. How is GCR going to show compliance with this limitation and what reasonable assurance does the Department have that GCR will not exceed that rate?
5. In the SO₂ calculations the permittee used an emission factor of 80 lbs./ton from AP-42 for the blast furnace. Based on the test data from the facility, the emission rate of SO₂ has exceeded the value of 80 lbs./ton. I have attached a table summarizing the test data from the facility for your use. The rate of emissions is important since we are trying to establish an appropriate emission limitation and level of reduction.
6. For your information, Gulf Coast Recycling is currently under enforcement. There are two open enforcement cases against GCR. I have attached the Consent Order for one and an NOI for the more recent case. The NOI addresses two successive quarterly exceedances of the Lead NAAQS at a monitor located just north of the facility and process rate exceedance of the furnace operations. Should you need more information regarding these cases please let us know. We will be evaluating additional control measures GCR can undertake to reduce lead emissions from the facility.

7. Also, for your information, the EPC has received a number of complaints regarding GCR from people working just south of the facility at the CSX railyard. The complaints are primarily concerning odors from the operation. The complainants are reporting a burning and irritating odor. They also indicate they can also taste it (leaves a taste in their mouth). We are still investigating these complaints and have verified some of the complaints. It is undetermined at this point whether the complaints can be attributed to SO₂, SAM, or other emissions. In order to adequately address this issue we will be looking for additional control measures from GCR.
8. The permit application also did not identify MACT as an applicable rule on page 23. The requirements of this rule will need to be incorporated into the issued permit.
- 9.a) The revised application that was submitted to the Department does not indicate whether a search was conducted for recent RACT/BACT/LAER determinations for SO₂ emissions from lead smelting operations. In order to provide the Department with reasonable assurance that the control technologies evaluated in the application are the best available, documentation needs to be provided on similar projects. In addition, the average cost effectiveness must be provided for each of the control technologies identified and used in the determination. Results of this type of analysis should be included in the BACT analysis in the application.
- b) Pursuant to available guidance material on conducting BACT determinations (i.e., Draft 1990 version of NSR Workshop Manual), the average cost effectiveness for each control technology evaluated must be provided. In addition, the incremental cost effectiveness must be determined to evaluate the difference in costs between a control technology and the next best control technology. No incremental cost effectiveness numbers were provided in the application.
- c) On page 24 of the application, a table is shown which identifies results of a search of the RACT/BACT/LAER Clearinghouse for CO emissions. As stated above, for the different control technologies, an average cost effectiveness was not provided. In addition, an incremental cost effectiveness was not provided for the difference in control efficiencies (i.e., proposed 90% reduction but table on page 24 shows higher efficiencies).

John Reynolds
November 21, 1995
Page 4

10. Also, for you information, we would request that any permit issued for the blast furnace require emission testing which demonstrates the control efficiencies for the operation.

Should you have any questions or need more information concerning these comments please call me at Suncom 543-5530.

Sincerely,

A handwritten signature in cursive script that reads "Liz Deken".

Liz Deken
Chief, Air Toxics Section

bm

SO₂ Stack Test Summary

<u>Test Date</u>	<u>SO₂ lbs./hr.</u>	<u>Production tons/hr.</u>	<u>Emissions lbs. SO₂/ton Pb produced</u>
November 1994	337.9	4.11	82.2
November 1993	377.6	2.90	130.2
December 1992	341	2.90	117.6
October 1991	260	2.90	89.7
February 1990	326	2.55	127.8
February 1989	339	2.55	132.9
February 1988	377	2.62	143.9
March 1987	353	2.47	142.9
February 1986	92	2.63	35
February 1985	313	2.8	111.8



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

November 8, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Re: Completeness Review - Construction Permit Application
PSD-FL-215

Dear Mr. Kitchen:

The Department received your additional submittal regarding the subject permit application on October 27. Since that submittal may impact the overall review of the application, the completeness review period will be extended for 30 days following October 27. Therefore, if the Department requires any additional information, an incompleteness letter will be mailed to you by November 24.

If you have any questions, please call me or John Reynolds at 904-488-1344.

Sincerely,

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

AAL/JR/t

CC: L. Deken, EPCHC
W. Thomas, SWD
L. Carlson, Lake Engineering

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3. Article Addressed to: Willis M. Kitchen, Pres. Gulf Coast Recycling 1901 N. 66th St. Tampa, FL 33619	4a. Article Number Z 127 632 566	4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
5. Signature (Addressee) [Signature]	7. Date of Delivery 11-10-95	8. Addressee's Address (Only if requested and fee is paid)
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PS Form 3800, March 1993

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Special Delivery Fee		
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TOTAL Postage & Fees	\$	
Postmark or Date	11-8-95 POD-FI-215	



LAKE
ENGINEERING, INC.

October 25, 1995

al

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OCT 27 1995

**BUREAU OF
AIR REGULATION**

Mr. C.H. Fancy
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. AC 29-209018, PSD-FL-215

Dear Mr. Fancy:

Enclosed are six identical diskettes containing the results of the refined modeling that was required in the DEP's June 28, 1994 letter to Gulf Coast. This letter concerned the completeness review for the initial PSD application (May 1994) and included comments received from the various reviewing agencies.

Specifically, the refined modeling was required per item number two on the first page of the letter. Item number two stated that refined modeling should be performed using a finer mesh receptor grid centered over any critical receptors identified in the screening phase. Critical receptors were defined as those receptors where exceedances of the AAQS were predicted when emissions from all 68 sources were modeled. A finer mesh grid of 100 meter spacing out to a distance of 500 meters was then placed around those critical receptors. The model was re-run (at the revised requested SO₂ emission rate of 175 lbs/hr) to further determine if Gulf Coast was significantly contributing to the modeled exceedances at the increased number of receptors. Gulf Coast would be significantly contributing if emissions from Gulf Coast only resulted in impacts greater than the significant impact levels at the same receptors and for the same averaging periods as the modeled AAQS exceedances.

To accomplish the refined modeling, each Maxi-File (.OVR files), that contained the values exceeding the respective AAQS minus the background value, from the modeling results submitted with the revised PSD application (October 1995) were analyzed to locate the critical receptors (where modeled AAQS exceedances occurred). Please note that no AAQS exceedances

were predicted for the 3-hour averaging period for years 1982-85 and the annual averaging period for 1983. New receptor grids were then centered around the critical receptors to incorporate the required 1000 m² mesh size. These new data files (.DTA files) were then re-run using ISCST3.

New Maxi-Files were generated using the same thresholds as before (AAQS minus background value for modeling all sources and significant impact level for modeling Gulf Coast's emissions only). The Maxi-Files for all sources were compared with the Maxi-Files for Gulf Coast only to determine if there were any instances where the AAQS were being exceeded at the same time and at the same receptors that the respective significant impact level was also being exceeded (e.g.:REF83-24.OVR was compared to REFG83-24.OVR, and so on. See below for file name descriptions.). The results show there are no instances where both the AAQS and the significant impact levels are being exceeded at the same time and receptors, indicating Gulf Coast is not significantly contributing to any of the modeled AAQS exceedances.

Following are descriptions of the filename prefixes used for the refined modeling. All files are included on the diskette and are in zipped format.

REF821-24.*	1982 met data, 24-hour averaging period, run 1 of 2 (large no. of receptors)
REF822-24.*	1982 met data, 24-hour averaging period, run 2 of 2 (large no. of receptors)
REF83-24.*	1983 met data, 24-hour averaging period
REF84-24.*	1984 met data, 24-hour averaging period
REF851-24.*	1985 met data, 24-hour averaging period, run 1 of 2 (large no. of receptors)
REF852-24.*	1985 met data, 24-hour averaging period, run 2 of 2 (large no. of receptors)
REF86-24.*	1986 met data, 24-hour averaging period
REF86-3.*	1986 met data, 3-hour averaging period
REF82-AN.*	1982 met data, annual averaging period
REF84-AN.*	1984 met data, annual averaging period
REF85-AN.*	1985 met data, annual averaging period
REF86-AN.*	1986 met data, annual averaging period

For the Maxi-Files (.OVR), "REFG" was used to denote the file contained exceedances of the respective significant impact level (Gulf Coast emissions only).

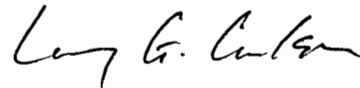
Thank you for your patience regarding the submittal of this additional modeling. This exercise was very time consuming due to the large degree of data comparison required to

Mr. C. H. Fancy
October 25, 1995
Page 3

generate the refined receptor grids and compare the Maxi-Files. If you have any questions regarding these modeling results or require additional information please contact me at (770) 395-0464.

Sincerely,

LAKE ENGINEERING, INC.



Larry G. Carlson
Air Pollution Compliance Specialist

LGC:cpc
Attachments

cc: Gulf Coast Recycling, Inc. w/attachment

460.2.1

\\460-95\1025fanc.231



GULF COAST RECYCLING, INC.

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

October 17, 1995

Cindy, FYI
John G
10/23
John R.
FYI
- Cindy

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

Subject: Gulf Coast Recycling, Inc.
 Initial Notification
 Applicability of 40 CFR 63, Subpart X
 NESHAPS from Secondary Lead Smelting

Dear Mr. Glunn:

This notification is being submitted in accordance with the provisions of 40 CFR 63.9(b), regarding the above referenced NESHAPS.

(i) The name and address of the owner or operator:

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

(ii) The physical location/address of the affected source:

The source is located at the address indicated above in Hillsborough County, Florida.

(iii) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date:

The source is subject to the recently promulgated NESHAPS from Secondary Lead Smelting pursuant to 40 CFR 63, Subpart X and the General Provisions in 40 CFR 63, Subpart A. The source's compliance date is June 23, 1997.

(iv) A brief description of the nature, size, design, and method of operation of the source, including its design capacity and an identification of each point of emission for each hazardous air pollutant:

Gulf Coast Recycling recycles discarded automotive and industrial lead-acid storage batteries. The batteries are crushed and

Mr. John Glunn
Florida Department of
Environmental Protection

October 17, 1995
Page 2

mechanically separated into various components. The lead-bearing components are fed into a blast furnace for lead recovery. The lead is refined further and eventually combined with alloying metals in refining kettles. Finished lead from the kettles is cast into ingots for shipment. The daily lead production rate of the GCR facility is about 90 tons.

A list of the HAP emission points at the site include the blast furnace, slag tapping, furnace charging, lead refining and slag processing. Fugitive emissions result from battery breaking, raw material storage, smelter building, dross storage and vehicle traffic.

(v) A statement whether the affected source is a major source or an area source:

Based on emission data from reference documents, the GCR facility is a major source of HAPs at the present time. However, GCR is expected to become an area source upon installation of an afterburner presently under FDEP air permitting review.

If you have any questions, please call George Townsend or me.

Very truly yours,

Willis M. Kitchen

Willis M. Kitchen
President

WK:par

c: J. Koogler, Koogler & Associates
J. Campbell, EPC of HC

by the Administrator in order to meet the compliance demonstration date specified in this section or the relevant standard.

(5) *Approval of request to use alternative monitoring method.* (i) The Administrator will notify the owner or operator of approval or intention to deny approval of the request to use an alternative monitoring method within 30 calendar days after receipt of the original request and within 30 calendar days after receipt of any supplementary information that is submitted. Before disapproving any request to use an alternative monitoring method, the Administrator will notify the applicant of the Administrator's intention to disapprove the request together with—

(A) Notice of the information and findings on which the intended disapproval is based; and

(B) Notice of opportunity for the owner or operator to present additional information to the Administrator before final action on the request. At the time the Administrator notifies the applicant of his or her intention to disapprove the request, the Administrator will specify how much time the owner or operator will have after being notified of the intended disapproval to submit the additional information.

(ii) The Administrator may establish general procedures and criteria in a relevant standard to accomplish the requirements of paragraph (f)(5)(i) of this section.

(iii) If the Administrator approves the use of an alternative monitoring method for an affected source under paragraph (f)(5)(i) of this section, the owner or operator of such source shall continue to use the alternative monitoring method until he or she receives approval from the Administrator to use another monitoring method as allowed by §63.8(f).

(6) *Alternative to the relative accuracy test.* An alternative to the relative accuracy test for CEMS specified in a relevant standard may be requested as follows:

(1) *Criteria for approval of alternative procedures.* An alternative to the test method for determining relative accuracy is available for affected sources with emission rates demonstrated to be

less than 50 percent of the relevant standard. The owner or operator of an affected source may petition the Administrator under paragraph (f)(6)(ii) of this section to substitute the relative accuracy test in section 7 of Performance Specification 2 with the procedures in section 10 if the results of a performance test conducted according to the requirements in §63.7, or other tests performed following the criteria in §63.7, demonstrate that the emission rate of the pollutant of interest in the units of the relevant standard is less than 50 percent of the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the owner or operator may petition the Administrator to substitute the relative accuracy test with the procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the CEMS is used continuously to determine compliance with the relevant standard.

(ii) *Petition to use alternative to relative accuracy test.* The petition to use an alternative to the relative accuracy test shall include a detailed description of the procedures to be applied, the location and the procedure for conducting the alternative, the concentration or response levels of the alternative relative accuracy materials, and the other equipment checks included in the alternative procedure(s). The Administrator will review the petition for completeness and applicability. The Administrator's determination to approve an alternative will depend on the intended use of the CEMS data and may require specifications more stringent than in Performance Specification 2.

(iii) *Rescission of approval to use alternative to relative accuracy test.* The Administrator will review the permission to use an alternative to the CEMS relative accuracy test and may rescind such permission if the CEMS data from a successful completion of the alternative relative accuracy procedure indicate that the affected source's emissions are approaching the level of the relevant standard. The criterion for reviewing the permission is that the col-

lection of CEMS data shows that emissions have exceeded 70 percent of the relevant standard for any averaging period, as specified in the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the criterion for reviewing the permission is that the collection of CEMS data shows that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for any averaging period, as specified in the relevant standard. The owner or operator of the affected source shall maintain records and determine the level of emissions relative to the criterion for permission to use an alternative for relative accuracy testing. If this criterion is exceeded, the owner or operator shall notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increased emissions. The Administrator will review the notification and may rescind permission to use an alternative and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2.

(g) *Reduction of monitoring data.* (1) The owner or operator of each CMS shall reduce the monitoring data as specified in this paragraph. In addition, each relevant standard may contain additional requirements for reducing monitoring data. When additional requirements are specified in a relevant standard, the standard will identify any unnecessary or duplicated requirements in this paragraph that the owner or operator need not comply with.

(2) The owner or operator of each CMS shall reduce all data to 6-minute averages calculated from 36 or more data points equally spaced over each 6-minute period. Data from CEMS for measurement other than opacity, unless otherwise specified in the relevant standard, shall be reduced to 1-hour averages computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of this part are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing

a 15-minute period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used. Time periods for averaging are defined in §63.2.

(3) The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O₂ or ng/J of pollutant).

(4) All emission data shall be converted into units of the relevant standard for reporting purposes using the conversion procedures specified in that standard. After conversion into units of the relevant standard, the data may be rounded to the same number of significant digits as used in that standard to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

(5) Monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments shall not be included in any data average computed under this part.

§63.9 Notification requirements.

(a) *Applicability and general information.* (1) The requirements in this section apply to owners and operators of affected sources that are subject to the provisions of this part, unless specified otherwise in a relevant standard.

(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

(3) If any State requires a notice that contains all the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.

(4)(i) Before a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the appropriate Regional Office of the EPA (to

the attention of the Director of the Division indicated in the list of the EPA Regional Offices in §63.13).

(ii) After a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each notification submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any notifications at its discretion.

(b) *Initial notifications.* (1)(i) The requirements of this paragraph apply to the owner or operator of an affected source when such source becomes subject to a relevant standard.

(ii) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source shall be subject to the notification requirements of this section.

(iii) Affected sources that are required under this paragraph to submit an initial notification may use the application for approval of construction or reconstruction under §63.5(d) of this subpart, if relevant, to fulfill the initial notification requirements of this paragraph.

(2) The owner or operator of an affected source that has an initial startup before the effective date of a relevant standard under this part shall notify the Administrator in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant

standard), shall provide the following information:

(i) The name and address of the owner or operator;

(ii) The address (i.e., physical location) of the affected source;

(iii) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;

(iv) A brief description of the nature, size, design, and method of operation of the source, including its operating design capacity and an identification of each point of emission for each hazardous air pollutant, or if a definitive identification is not yet possible, a preliminary identification of each point of emission for each hazardous air pollutant; and

(v) A statement of whether the affected source is a major source or an area source.

(3) The owner or operator of a new or reconstructed affected source, or a source that has been reconstructed such that it is an affected source, that has an initial startup after the effective date of a relevant standard under this part and for which an application for approval of construction or reconstruction is not required under §63.5(d), shall notify the Administrator in writing that the source is subject to the relevant standard no later than 120 days after initial startup. The notification shall provide all the information required in paragraphs (b)(2)(i) through (b)(2)(v) of this section, delivered or postmarked with the notification required in paragraph (b)(5).

(4) The owner or operator of a new or reconstructed major affected source that has an initial startup after the effective date of a relevant standard under this part and for which an application for approval of construction or reconstruction is required under §63.5(d) shall provide the following information in writing to the Administrator:

(i) A notification of intention to construct a new major affected source, reconstruct a major affected source, or reconstruct a major source such that the source becomes a major affected source with the application for approval of construction or reconstruction as specified in §63.5(d)(1)(i);

(ii) A notification of the date when construction or reconstruction was commenced, submitted simultaneously with the application for approval of construction or reconstruction, if construction or reconstruction was commenced before the effective date of the relevant standard;

(iii) A notification of the date when construction or reconstruction was commenced, delivered or postmarked not later than 30 days after such date, if construction or reconstruction was commenced after the effective date of the relevant standard;

(iv) A notification of the anticipated date of startup of the source, delivered or postmarked not more than 60 days or less than 30 days before such date; and

(v) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

(5) After the effective date of any relevant standard established by the Administrator under this part, whether or not an approved permit program is effective in the State in which an affected source is (or would be) located, an owner or operator who intends to construct a new affected source or reconstruct an affected source subject to such standard, or reconstruct a source such that it becomes an affected source subject to such standard, shall notify the Administrator, in writing, of the intended construction or reconstruction. The notification shall be submitted as soon as practicable before the construction or reconstruction is planned to commence (but no sooner than the effective date of the relevant standard) if the construction or reconstruction commences after the effective date of a relevant standard promulgated in this part. The notification shall be submitted as soon as practicable before startup but no later than 60 days after the effective date of a relevant standard promulgated in this part if the construction or reconstruction had commenced and initial startup had not occurred before the standard's effective date. The notification shall include all the information required for an application for approval of construction or reconstruction as specified in §63.5(d). For major sources,

the application for approval of construction or reconstruction may be used to fulfill the requirements of this paragraph.

(c) *Request for extension of compliance.* If the owner or operator of an affected source cannot comply with a relevant standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with §63.6(i)(5) of this subpart, he/she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in §63.6(i)(4) through §63.6(i)(6).

(d) *Notification that source is subject to special compliance requirements.* An owner or operator of a new source that is subject to special compliance requirements as specified in §63.6(b)(3) and §63.6(b)(4) shall notify the Administrator of his/her compliance obligations not later than the notification dates established in paragraph (b) of this section for new sources that are not subject to the special provisions.

(e) *Notification of performance test.* The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under §63.7(c), if requested by the Administrator, and to have an observer present during the test.

(f) *Notification of opacity and visible emission observations.* The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting the opacity or visible emission observations specified in §63.6(h)(5), if such observations are required for the source by a relevant standard. The notification shall be submitted with the notification of the performance test date, as specified in paragraph (e) of this section, or if no performance test is required or visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under §63.7, the owner or operator shall deliver or post-

mark the notification not less than 30 days before the opacity or visible emission observations are scheduled to take place.

(g) *Additional notification requirements for sources with continuous monitoring systems.* The owner or operator of an affected source required to use a CMS by a relevant standard shall furnish the Administrator written notification as follows:

(1) A notification of the date the CMS performance evaluation under §63.8(e) is scheduled to begin, submitted simultaneously with the notification of the performance test date required under §63.7(b). If no performance test is required, or if the requirement to conduct a performance test has been waived for an affected source under §63.7(h), the owner or operator shall notify the Administrator in writing of the date of the performance evaluation at least 60 calendar days before the evaluation is scheduled to begin;

(2) A notification that COMS data results will be used to determine compliance with the applicable opacity emission standard during a performance test required by §63.7 in lieu of Method 9 or other opacity emissions test method data, as allowed by §63.6(h)(7)(ii), if compliance with an opacity emission standard is required for the source by a relevant standard. The notification shall be submitted at least 60 calendar days before the performance test is scheduled to begin; and

(3) A notification that the criterion necessary to continue use of an alternative to relative accuracy testing, as provided by §63.8(f)(6), has been exceeded. The notification shall be delivered or postmarked not later than 10 days after the occurrence of such exceedance, and it shall include a description of the nature and cause of the increased emissions.

(h) *Notification of compliance status.* (1) The requirements of paragraphs (h)(2) through (h)(4) of this section apply when an affected source becomes subject to a relevant standard.

(2)(i) Before a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit to the Ad-

ministrator a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the relevant standard. The notification shall list—

(A) The methods that were used to determine compliance;

(B) The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;

(C) The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;

(D) The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard;

(E) An analysis demonstrating whether the affected source is a major source or an area source (using the emissions data generated for this notification);

(F) A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and

(G) A statement by the owner or operator of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standard or other requirements.

(ii) The notification shall be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard (unless a different reporting period is specified in a relevant standard, in which case the letter shall be sent before the close of business on the day the report of the relevant testing or monitoring results is required to be delivered or postmarked). For example, the notification shall be sent before close of business on the 60th (or other required) day following completion of the initial performance test and again

before the close of business on the 60th (or other required) day following the completion of any subsequent required performance test. If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with an opacity or visible emission standard under this part, the notification of compliance status shall be sent before close of business on the 30th day following the completion of opacity or visible emission observations.

(3) After a title V permit has been issued to the owner or operator of an affected source, the owner or operator of such source shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under this part. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard.

(4) [Reserved]

(5) If an owner or operator of an affected source submits estimates or preliminary information in the application for approval of construction or reconstruction required in §63.5(d) in place of the actual emissions data or control efficiencies required in paragraphs (d)(1)(i)(H) and (d)(2) of §63.5, the owner or operator shall submit the actual emissions data and other correct information as soon as available but no later than with the initial notification of compliance status required in this section.

(6) Advice on a notification of compliance status may be obtained from the Administrator.

(i) *Adjustment to time periods or postmark deadlines for submittal and review of required communications.* (1)(i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (1)(2) and (1)(3) of this section, the owner or operator of an affected source remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (1)(2) and (1)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part:

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

(j) *Change in information already provided.* Any change in the information already provided under this section shall be provided to the Administrator in writing within 15 calendar days after the change.

§63.10 Recordkeeping and reporting requirements.

(a) *Applicability and general information.* (1) The requirements of this section apply to owners or operators of affected sources who are subject to the provisions of this part, unless specified otherwise in a relevant standard.

lations, or the regulations codified in this chapter to implement the Federal title V permit program (42 U.S.C. 7661), whichever regulations are applicable.

§ 63.2 Definitions.

The terms used in this part are defined in the Act or in this section as follows:

Act means the Clean Air Act (42 U.S.C. 7401 *et seq.*, as amended by Pub. L. 101-549, 104 Stat. 2399).

Actual emissions is defined in subpart D of this part for the purpose of granting a compliance extension for an early reduction of hazardous air pollutants.

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., a State that has been delegated the authority to implement the provisions of this part).

Affected source, for the purposes of this part, means the stationary source, the group of stationary sources, or the portion of a stationary source that is regulated by a relevant standard or other requirement established pursuant to section 112 of the Act. Each relevant standard will define the "affected source" for the purposes of that standard. The term "affected source," as used in this part, is separate and distinct from any other use of that term in EPA regulations such as those implementing title IV of the Act. Sources regulated under part 60 or part 61 of this chapter are not affected sources for the purposes of part 63.

Alternative emission limitation means conditions established pursuant to sections 112(1)(5) or 112(1)(6) of the Act by the Administrator or by a State with an approved permit program.

Alternative emission standard means an alternative means of emission limitation that, after notice and opportunity for public comment, has been demonstrated by an owner or operator to the Administrator's satisfaction to achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such pollutant achieved under a relevant design, equipment, work practice, or operational emission standard, or combination thereof, established under this

part pursuant to section 112(h) of the Act.

Alternative test method means any method of sampling and analyzing for an air pollutant that is not a test method in this chapter and that has been demonstrated to the Administrator's satisfaction, using Method 301 in Appendix A of this part, to produce results adequate for the Administrator's determination that it may be used in place of a test method specified in this part.

Approved permit program means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to title V of the Act (42 U.S.C. 7661).

Area source means any stationary source of hazardous air pollutants that is not a major source as defined in this part.

Commenced means, with respect to construction or reconstruction of a stationary source, that an owner or operator has undertaken a continuous program of construction or reconstruction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction.

Compliance date means the date by which an affected source is required to be in compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established by the Administrator (or a State with an approved permit program) pursuant to section 112 of the Act.

Compliance plan means a plan that contains all of the following:

(1) A description of the compliance status of the affected source with respect to all applicable requirements established under this part;

(2) A description as follows: (i) For applicable requirements for which the source is in compliance, a statement that the source will continue to comply with such requirements;

(ii) For applicable requirements that the source is required to comply with by a future date, a statement that the source will meet such requirements on a timely basis;

(iii) For applicable requirements for which the source is not in compliance, a narrative description of how the source will achieve compliance with such requirements on a timely basis;

(3) A compliance schedule, as defined in this section; and

(4) A schedule for the submission of certified progress reports no less frequently than every 6 months for affected sources required to have a schedule of compliance to remedy a violation.

Compliance schedule means: (1) In the case of an affected source that is in compliance with all applicable requirements established under this part, a statement that the source will continue to comply with such requirements; or

(2) In the case of an affected source that is required to comply with applicable requirements by a future date, a statement that the source will meet such requirements on a timely basis and, if required by an applicable requirement, a detailed schedule of the dates by which each step toward compliance will be reached; or

(3) In the case of an affected source not in compliance with all applicable requirements established under this part, a schedule of remedial measures, including an enforceable sequence of actions or operations with milestones and a schedule for the submission of certified progress reports, where applicable, leading to compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established pursuant to section 112 of the Act for which the affected source is not in compliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction non-compliance with, the applicable requirements on which it is based.

Construction means the on-site fabrication, erection, or installation of an affected source.

Continuous emission monitoring system (CEMS) means the total equipment that may be required to meet the data acquisition and availability require-

ments of this part, used to sample, condition (if applicable), analyze, and provide a record of emissions.

Continuous monitoring system (CMS) is a comprehensive term that may include, but is not limited to, continuous emission monitoring systems, continuous opacity monitoring systems, continuous parameter monitoring systems, or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis as defined by the regulation.

Continuous opacity monitoring system (COMS) means a continuous monitoring system that measures the opacity of emissions.

Continuous parameter monitoring system means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of process or control system parameters.

Effective date means: (1) With regard to an emission standard established under this part, the date of promulgation in the FEDERAL REGISTER of such standard; or

(2) With regard to an alternative emission limitation or equivalent emission limitation determined by the Administrator (or a State with an approved permit program), the date that the alternative emission limitation or equivalent emission limitation becomes effective according to the provisions of this part. The effective date of a permit program established under title V of the Act (42 U.S.C. 7661) is determined according to the regulations in this chapter establishing such programs.

Emission standard means a national standard, limitation, prohibition, or other regulation promulgated in a subpart of this part pursuant to sections 112(d), 112(h), or 112(f) of the Act.

Emissions averaging is a way to comply with the emission limitations specified in a relevant standard, whereby an affected source, if allowed under a subpart of this part, may create emission credits by reducing emissions from specific points to a level below that required by the relevant standard, and those credits are used to offset emis-

sions from points that are not controlled to the level required by the relevant standard.

EPA means the United States Environmental Protection Agency.

Equivalent emission limitation means the maximum achievable control technology emission limitation (MACT emission limitation) for hazardous air pollutants that the Administrator (or a State with an approved permit program) determines on a case-by-case basis, pursuant to section 112(g) or section 112(j) of the Act, to be equivalent to the emission standard that would apply to an affected source if such standard had been promulgated by the Administrator under this part pursuant to section 112(d) or section 112(h) of the Act.

Excess emissions and continuous monitoring system performance report is a report that must be submitted periodically by an affected source in order to provide data on its compliance with relevant emission limits, operating parameters, and the performance of its continuous parameter monitoring systems.

Existing source means any affected source that is not a new source.

Federally enforceable means all limitations and conditions that are enforceable by the Administrator and citizens under the Act or that are enforceable under other statutes administered by the Administrator. Examples of federally enforceable limitations and conditions include, but are not limited to:

(1) Emission standards, alternative emission standards, alternative emission limitations, and equivalent emission limitations established pursuant to section 112 of the Act as amended in 1990;

(2) New source performance standards established pursuant to section 111 of the Act, and emission standards established pursuant to section 112 of the Act before it was amended in 1990;

(3) All terms and conditions in a title V permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable;

(4) Limitations and conditions that are part of an approved State Imple-

mentation Plan (SIP) or a Federal Implementation Plan (FIP);

(5) Limitations and conditions that are part of a Federal construction permit issued under 40 CFR 52.21 or a construction permit issued under regulations approved by the EPA in accordance with 40 CFR part 51;

(6) Limitations and conditions that are part of an operating permit issued pursuant to a program approved by the EPA into a SIP as meeting the minimum criteria for Federal enforceability, including adequate notice of opportunity for EPA and public comment prior to issuance of the final permit and practicable enforceability;

(7) Limitations and conditions that are part of a State rule or program that has been approved by the EPA under subpart 112 of this part for the purposes of implementing and enforcing section 112 of the Act;

(8) Individual consent agreements that the EPA has legal authority to create.

Fixed capital cost means the capital needed to provide all the depreciable components of an existing source.

Fugitive emissions means those emissions from a stationary source that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Under section 112 of the Act, all fugitive emissions are to be considered in determining whether a stationary source is a major source.

Hazardous air pollutant means any pollutant listed in or pursuant to section 112(b) of the Act.

Issuance of a part 70 permit occurs, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a title V permit occurs immediately after the EPA takes final action on the final permit.

Lesser quantity means a quantity of hazardous air pollutant that is or may be emitted by a stationary source that the Administrator establishes in order to define a major source under an applicable subpart of this part.

Major source means any stationary source or group of stationary sources located within a contiguous area and

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common control that emits or the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of a combination of hazardous air pollutants, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria than those specified in this sentence.

Malfunction means any sudden, infrequent and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

New source means any affected source that is the subject of construction or reconstruction of which is commenced after the Administrator first proposes a relevant emission standard under this part.

One-hour period, unless otherwise defined in an applicable subpart, means a 60-minute period commencing on the hour.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background. For continuous opacity monitoring systems, opacity means the fraction of incident light that is attenuated by an optical medium.

Owner or operator means any person who owns, leases, operates, controls, or supervises a stationary source.

Part 70 permit means any permit issued, renewed, or revised pursuant to part 70 of this chapter.

Performance audit means a procedure to analyze blind samples, the content of which is known by the Administrator, simultaneously with the analysis of performance test samples in order to provide a measure of test data quality.

Performance evaluation means the product of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.

Performance test means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard

as specified in the performance test section of the relevant standard.

Permit modification means a change to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

Permit program means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

Permit revision means any permit modification or administrative permit amendment to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

Permitting authority means: (1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or

(2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

Potential to emit means 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 stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

Reconstruction means the replacement of components of an affected or a previously unaffected stationary source to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and

(2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the

Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

Regulation promulgation schedule means the schedule for the promulgation of emission standards under this part, established by the Administrator pursuant to section 112(e) of the Act and published in the FEDERAL REGISTER.

Relevant standard means:

- (1) An emission standard;
- (2) An alternative emission standard;
- (3) An alternative emission limitation; or
- (4) An equivalent emission limitation established pursuant to section 112 of the Act that applies to the stationary source, the group of stationary sources, or the portion of a stationary source regulated by such standard or limitation.

A relevant standard may include or consist of a design, equipment, work practice, or operational requirement, or other measure, process, method, system, or technique (including prohibition of emissions) that the Administrator (or a State) establishes for new or existing sources to which such standard or limitation applies. Every relevant standard established pursuant to section 112 of the Act includes subpart A of this part and all applicable appendices of this part or of other parts of this chapter that are referenced in that standard.

Responsible official means one of the following:

(1) For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representative is approved in advance by the Administrator.

(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

(3) For a municipality, State, Federal, or other public agency: either principal executive officer or rank elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of the EPA).

(4) For affected sources (as defined in this part) applying for or subject to title V permit: "responsible official" shall have the same meaning as defined in part 70 or Federal title V regulation in this chapter (42 U.S.C. 7661), which ever is applicable.

Run means one of a series of emission or other measurements needed to determine emissions for a representative operating period or cycle as specified in this part.

Shutdown means the cessation of operation of an affected source for any purpose.

Six-minute period means, with respect to opacity determinations, any one of the 10 equal parts of a 1-hour period.

Standard conditions means a temperature of 293 K (68° F) and a pressure of 101.3 kilopascals (29.92 in. Hg).

Startup means the setting in operation of an affected source for any purpose.

State means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement: (1) The provisions of this part and/or (2) the permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.

Stationary source means any building, structure, facility, or installation which emits or may emit any air pollutant.

Test method means the validated procedure for sampling, preparing, and analyzing for an air pollutant specified in a relevant standard as the performance test procedure. The test method

include methods described in an appendix of this chapter, test methods incorporated by reference in this part, methods validated for an application through procedures in Method 301 of appendix A of this part.

Title V permit means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.

Visible emission means the observation of an emission of opacity or optical density above the threshold of visibility.

§ 63.3 Units and abbreviations.

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:

(a) *System International (SI) units of measure:*

- A = ampere
- g = gram
- Hz = hertz
- J = joule
- K = degree Kelvin
- kg = kilogram
- L = liter
- m = meter
- m³ = cubic meter
- mg = milligram = 10⁻³ gram
- ml = milliliter = 10⁻³ liter
- mm = millimeter = 10⁻³ meter
- Mg = megagram = 10⁶ gram = metric ton
- MJ = megajoule
- mol = mole
- N = newton
- ng = nanogram = 10⁻⁹ gram
- nm = nanometer = 10⁻⁹ meter
- Pa = pascal
- s = second
- V = volt
- W = watt
- Ω = ohm
- μg = microgram = 10⁻⁶ gram
- μl = microliter = 10⁻⁶ liter

(b) *Other units of measure:*

- Btu = British thermal unit
- °C = degree Celsius (centigrade)
- cal = calorie
- cfm = cubic feet per minute
- cc = cubic centimeter
- cu ft = cubic feet
- d = day
- dscf = dry cubic feet

dcm = dry cubic meter
dscf = dry cubic feet at standard conditions

dscm = dry cubic meter at standard conditions

eq = equivalent

°F = degree Fahrenheit

ft = feet

ft² = square feet

ft³ = cubic feet

gal = gallon

gr = grain

g-eq = gram equivalent

g-mole = gram mole

hr = hour

in. = inch

in. H₂O = inches of water

K = 1,000

kcal = kilocalorie

lb = pound

lpm = liter per minute

meq = milliequivalent

min = minute

MW = molecular weight

oz = ounces

ppb = parts per billion

ppbw = parts per billion by weight

ppbv = parts per billion by volume

ppm = parts per million

ppmw = parts per million by weight

ppmv = parts per million by volume

psia = pounds per square inch absolute

psig = pounds per square inch gage

°R = degree Rankine

scf = cubic feet at standard conditions

scfh = cubic feet at standard conditions

per hour

scm = cubic meter at standard conditions

tions

sec = second

sq ft = square feet

std = at standard conditions

v/v = volume per volume

yd² = square yards

yr = year

(c) *Miscellaneous:*

- act = actual
- avg = average
- I.D. = inside diameter
- M = molar
- N = normal
- O.D. = outside diameter
- % = percent

§ 63.4 Prohibited activities and circumvention.

(a) *Prohibited activities.* (1) No owner or operator subject to the provisions of this part shall operate any affected

est expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference—see §60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(ii) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

(3) For other liquids, the vapor pressure:

(i) May be obtained from standard reference texts, or

(ii) Determined by ASTM Method D2879-83 (incorporated by reference—see §60.17); or

(iii) Measured by an appropriate method approved by the Administrator; or

(iv) Calculated by an appropriate method approved by the Administrator.

(f) The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.

(1) Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in paragraph (e) of this section.

(2) For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in §60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

(i) ASTM Method D2879-83 (incorporated by reference—see §60.17); or

(ii) ASTM Method D323-82 (incorporated by reference—see §60.17); or

(iii) As measured by an appropriate method as approved by the Administrator.

(g) The owner or operator of each vessel equipped with a closed vent system and control device meeting the specifications of §60.112b is exempt from the requirements of paragraphs (c) and (d) of this section.

§60.117b Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: §§60.111b(f)(4), 60.114b, 60.116b(e)(3)(iii), 60.116b(e)(3)(iv), and 60.116b(f)(2)(iii).

[52 FR 11429, Apr. 8, 1987, as amended at 52 FR 22780, June 16, 1987]

Subpart L—Standards of Performance for Secondary Lead Smelters

§60.120 Applicability and designation of affected facility.

(a) The provisions of this subpart are applicable to the following affected facilities in secondary lead smelters: Pot furnaces of more than 250 kg (550 lb) charging capacity, blast (cupola) furnaces, and reverberatory furnaces.

(b) Any facility under paragraph (a) of this section that commences construction or modification after June 11, 1973, is subject to the requirements of this subpart.

[42 FR 37937, July 25, 1977]

§60.121 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part.

(a) *Reverberatory furnace* includes the following types of reverberatory furnaces: stationary, rotating, rocking, and tilting.

(b) *Secondary lead smelter* means any facility producing lead from a leadbearing scrap material by smelting to the metallic form.

(c) *Lead* means elemental lead or alloys in which the predominant component is lead.

[39 FR 9317, Mar. 8, 1974; 39 FR 13776, Apr. 17, 1974]

§60.122 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from a blast (cupola) or reverberatory furnace any gases which:

(1) Contain particulate matter in excess of 50 mg/dscm (0.022 gr/dscf).

(2) Exhibit 20 percent opacity or greater.

(b) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from any pot furnace any gases which exhibit 10 percent opacity or greater.

[39 FR 9317, Mar. 8, 1974, as amended at 40 FR 46259, Oct. 6, 1975]

§60.123 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(b) The owner or operator shall determine compliance with the particulate matter standards in §60.122 as follows:

(1) Method 5 shall be used to determine the particulate matter concentration during representative periods of furnace operation, including charging and tapping. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf).

(2) Method 9 and the procedures in §60.11 shall be used to determine opacity.

[54 FR 6667, Feb. 14, 1989]

Subpart M—Standards of Performance for Secondary Brass Bronze Production Plants

§60.130 Applicability and designation of affected facility.

(a) The provisions of this subpart applicable to the following affected facilities in secondary brass or bronze production plants: Reverberatory electric furnaces of 1,000 kg (2205 lb) greater production capacity and (cupola) furnaces of 250 kg/h (550 or greater production capacity) furnaces from which molten brass or bronze are cast into the shape of finished products, such as foundry naces, are not considered to be affected facilities.

(b) Any facility under paragraph (a) of this section that commences construction or modification after June 11, 1973, is subject to the requirements of this subpart.

[42 FR 37937, July 25, 1977, as amended at 42 FR 43618, Oct. 30, 1984]

§60.131 Definitions.

As used in this subpart, all terms defined herein shall have the meaning given them in the Act and in subpart L of this part.

(a) *Brass or bronze* means any alloy containing copper as its predominant constituent, and lesser amounts of zinc, tin, lead, or other metals.

(b) *Reverberatory furnace* includes the following types of reverberatory furnaces: Stationary, rotating, rocking, and tilting.

(c) *Electric furnace* means any furnace which uses electricity to produce 50 percent of the heat required for the production of refined brass or bronze.

(d) *Blast furnace* means any furnace used to recover metal from slag.

[39 FR 9318, Mar. 8, 1974]

§60.132 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall discharge or cause the discharge into the atmosphere from a reverberatory furnace any gases which:

Emission unit | ~~01~~ | ~~02~~ | ~~03~~ | ~~04~~ | ~~05~~ | ~~06~~ | ~~07~~ | ~~08~~ | ~~09~~ | ~~10~~ | ~~11~~ | ~~12~~ | ~~13~~ | ~~14~~ | ~~15~~ | ~~16~~ | ~~17~~ | ~~18~~ | ~~19~~ | ~~20~~ | ~~21~~ | ~~22~~ | ~~23~~ | ~~24~~ | ~~25~~ | ~~26~~ | ~~27~~ | ~~28~~ | ~~29~~ | ~~30~~ | ~~31~~ | ~~32~~ | ~~33~~ | ~~34~~ | ~~35~~ | ~~36~~ | ~~37~~ | ~~38~~ | ~~39~~ | ~~40~~ | ~~41~~ | ~~42~~ | ~~43~~ | ~~44~~ | ~~45~~ | ~~46~~ | ~~47~~ | ~~48~~ | ~~49~~ | ~~50~~ | ~~51~~ | ~~52~~ | ~~53~~ | ~~54~~ | ~~55~~ | ~~56~~ | ~~57~~ | ~~58~~ | ~~59~~ | ~~60~~ | ~~61~~ | ~~62~~ | ~~63~~ | ~~64~~ | ~~65~~ | ~~66~~ | ~~67~~ | ~~68~~ | ~~69~~ | ~~70~~ | ~~71~~ | ~~72~~ | ~~73~~ | ~~74~~ | ~~75~~ | ~~76~~ | ~~77~~ | ~~78~~ | ~~79~~ | ~~80~~ | ~~81~~ | ~~82~~ | ~~83~~ | ~~84~~ | ~~85~~ | ~~86~~ | ~~87~~ | ~~88~~ | ~~89~~ | ~~90~~ | ~~91~~ | ~~92~~ | ~~93~~ | ~~94~~ | ~~95~~ | ~~96~~ | ~~97~~ | ~~98~~ | ~~99~~ | ~~00~~

Emission Unit

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00
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| EU ID | Stat | Description

0	A	1500000 (ON & OFF)
002	A	THREE 52 TON MELT KETTLES W/ BGHSE ONLY 2 OPERATE AT A TIME
004	A	BAGHOUSE FOR SLAG/LEAD TAP BLAST FURNACE-SLAG TAP SLAGGING F
006	A	BGHSE CONTROLS GHARGING OF BLAST FURNACES(P1) SKIP HOIST B
007	C	CRUSHER OPERATION WITH BAGHOUSE
008	C	SODA ASH SILO WITH BAGHOUSE
009	C	BUILDING ENCLOSURE
010	C	CEMENT STORAGE SILO
005	I	78 TON REFINING KETTLE FIRED BY NATURAL GAS.

Press [ENTER] to Select this Emission Unit

Count: *9

< Replace >

10-13-95

I N T E R O F F I C E M E M O R A N D U M

Date: 13-Oct-1995 09:31am EST
From: Elizabeth Deken TPA
DEKEN_E@A1@EPIC66
Dept: Hillsborough County
Tel No: 813/272-5530
SUNCOM:

TO: Alvaro Linero TAL (LINERO_A@A1@DER)

Subject: Gulf Coast Recycling

I received your message regarding GCR's application amendment. I will try to get any comments I have to John R. as soon as I receive and review the changes. With regard to the MACT, the standard was promulgated in June of 1995. So the standard has been out for a while and I know GCR has been aware of that. I also know that they had a very good idea about how the standard was going to affect them prior to promulgation because they received the proposal and Joyce M. from GCR worked through her trade organization on the development of the rule. In other words, GCR was not surprised or unprepared for any requirements from the MACT when it was promulgated in June. Because the rule has been promulgated for a few months now, the notification deadline for GCR to inform the Department that they are subject to the standard is due this month I believe. You should probably check with Cindy Phillips to get details regarding the MACT and notification process. I believe we should act on the amendment or changes to the application as soon as we can and I will work with John R. on any issues that may arise regarding the application.

I N T E R O F F I C E M E M O R A N D U M

Date: 13-Oct-1995 10:21am EST
From: Alvaro Linero TAL
LINERO_A
Dept: Air Resources Management
Tel No: 904/921-9532
SUNCOM: 291-9532

TO: Cindy Phillips TAL

(PHILLIPS_C)

CC: John Reynolds TAL

(REYNOLDS_J)

Subject: FWD: Gulf Coast Recycling

Update of MACT applicability to GCR as seen by HCEPC.

10-11-95

al
You, John R
& I need to
come to a
consensus on
this
Clair

I N T E R O F F I C E M E M O R A N D U M

Date: 11-Oct-1995 04:25pm EST
From: Alvaro Linero TAL
LINERO A
Dept: Air Resources Management
Tel No: 904/921-9532
SUNCOM: 291-9532

TO: See Below

Subject: Gulf Coast Recycling - Battery Recycling Facility

We received a revised application from Gulf Coast Recycling who have been operating for quite some time without a proper PSD permit.

They have continued to operate while replying slowly to our requests for more information to evaluate their original application. Lately, they claimed to want to see how proposed EPA MACT rules for this industry turn out. I'm not sure to what extent this is addressed in the new application. In any case, they still keep operating while we have to review a revised project.

We will very shortly send to everyone (including EPA and NPS) a copy of the revised application. We would appreciate your prompt review and response so we can send them a completeness letter as soon as possible and so they will get into compliance as soon as possible.

John Reynolds is coordinating this one. Thanks.

Distribution:

TO: Elizabeth Deken TPA	(DEKEN_E @ A1 @ EPIC66)
TO: Jerry N. Campbell TPA	(CAMPBELL_JN @ A1 @ EPIC66)
TO: Bill Thomas TPA	(THOMAS_B @ A1 @ TPA1)
CC: Clair Fancy TAL	(FANCY_C)
CC: John Brown TAL	(BROWN_J)
CC: Cindy Phillips TAL	(PHILLIPS_C)
CC: John Reynolds TAL	(REYNOLDS_J)

10-11-95

al
Thanks
ca

I N T E R O F F I C E M E M O R A N D U M

Date: 11-Oct-1995 05:17pm EST
From: Alvaro Linero TAL
LINERO_A
Dept: Air Resources Management
Tel No: 904/921-9532
SUNCOM: 291-9532

TO: Doug Beason TAL (BEASON_D)
CC: John Reynolds TAL (REYNOLDS_J)
CC: Clair Fancy TAL (FANCY_C)

Subject: Gulf Coast Recycling

Doug. We received revised application from Gulf Coast. After internal discussions we ask that you not issue a final denial at this time. Feel free to call. Thanks.

10-11-95

October 11, 1995

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

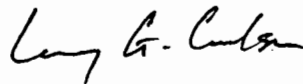
RE: AC 29-209018, PSD-FL-215

Dear Mr. Fancy:

Enclosed are the six copies of **Section 6** of the Gulf Coast PSD application as I noted in the package of binders sent to you on Tuesday, October 10, 1995. Please insert them in the appropriate section of each binder. Also enclosed is a diskette containing an ELSA version of **Section 6**. I apologize for the delay and any inconvenience this may have caused you.

Sincerely,

LAKE ENGINEERING, INC.



Larry G. Carlson
Air Pollution Compliance Specialist

LGC:shm
Enclosures

460.2.1

\\460-95\1011\FANC.23L

6.0 APPLICATION FORMS

The next 40 pages consist of the completed DEP application forms.

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR RESOURCES MANAGEMENT**

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Identification of Facility Addressed in This Application

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

Scope of Application

Emissions Unit ID	Description of Emissions Unit
1, 4, 6	Blast Furnace

Purpose of Application and Category

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

This Application for Air Permit is submitted to obtain :

Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number :

Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed :

Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number :

Operation permit to be revised :

Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application.

Operation permit to be revised/corrected :

Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit.

Operation permit to be revised :

Reason for revision :

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

This Application for Air Permit is submitted to obtain :

- Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s) :

- Renewal air operation permit under 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.

Operation permit to be revised :

Reason for revision :

Category III : All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain :

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

Current operation permit number(s), if any :

AO29-173310

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

emissions of one or more existing, permitted emissions units.

Current operation permit number(s) :

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

Application Processing Fee

Attached - Amount : _____ NA

Construction/Modification Information

1. Description of Proposed Project or Alterations :

This document is a revised PSD application for the installation of a 60-ton blast furnace replacing two smaller furnaces.

2. Projected or Actual Date of Commencement of Construction : 11/ 1/84

3. Projected Date of Completion of Construction : 12/ 1/84

Professional Engineer Certification

1. Professional Engineer Name : Frank J. Burbach

Registration Number : 42496

2. Professional Engineer Mailing Address :

Organization/Firm : Lake Engineering, Inc.

Street Address : 35 Glenlake Parkway, Suite 500

City : Atlanta

State : GA

Zip Code : 30328-____

3. Professional Engineer Telephone Numbers :

Telephone : (770)395-0464

Fax : (770)395-0474

4. Professional Engineer Statement :

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

(1) To the best of my knowledge, there is reasonable assurance (a) that the air pollutant emissions unit(s) and the air pollutant control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions in the Florida Statutes and rules of the Department of Environmental Protection; or (b) for any application for a TitleV source air operation permit, that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in the application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application;

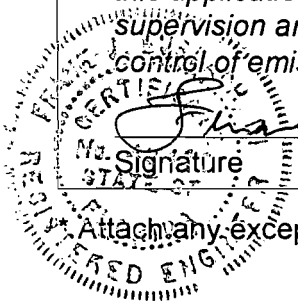
(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions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

(3) For any application for an air construction permit for one or more proposed new or modified emissions units, the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

Frank J. Burbach

Signature

Date 10/11/95



* Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact :

Name : George Townsend
Title :

2. Application Contact Mailing Address :

Organization/Firm : Gulf Coast Recycling, Inc.
Street Address : 1901 N. 66th Street
City : Tampa
State : FL Zip Code : 33619-____

3. Application Contact Telephone Numbers :

Telephone : (813)626-6151 Fax : (813)622-8388

Application Comment

The application fee was submitted with the original submittal in May 1994.

Facility Contact

1. Name and Title of Facility Contact :

Name : George Townsend
Title :

2. Facility Contact Mailing Address :

Organization/Firm : Gulf Coast Recycling, Inc.
Street Address : 1901 N. 66th Street
City : Tampa
State : FL Zip Code : 33619-____

3. Facility Contact Telephone Numbers :

Telephone : (813)626-6151 Fax : (813)622-8388

Facility Regulatory Classifications

1. Small Business Stationary Source?	N
2. Title V Source?	Y
3. Synthetic Non-Title V Source?	N
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	Y
5. Synthetic Minor Source of Pollutants Other than HAPs?	N
6. Major Source of Hazardous Air Pollutants (HAPs)?	N
7. Synthetic Minor Source of HAPs?	Y
8. One or More Emissions Units Subject to NSPS?	Y
9. One or More Emission Units Subject to NESHAP?	Y
10. Title V Source by EPA Designation?	N
11. Facility Regulatory Classifications Comment :	
<p>Although this facility is classified as a Title V source, the scope of this application does not include a Title V application. Regulatory classifications are after construction being proposed in this application is complete.</p>	

D. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location :	Figure 1.1
2. Facility Plot Plan :	Figure 1.2
3. Process Flow Diagram(s) :	Figure 1.3
4. Precautions to Prevent Emissions of Unconfined Particulate Matter :	NA
5. Fugitive Emissions Identification :	NA
6. Supplemental Information for Construction Permit Application :	NA

Additional Supplemental Requirements for Category I Applications Only

7. List of Insignificant Activities :	NA
8. List of Equipment/Activities Regulated under Title VI :	NA
9. Alternative Methods of Operation :	NA
10. Alternative Modes of Operation (Emissions Trading) :	NA
11. Enhanced Monitoring Plan :	NA
12. Risk Management Plan Verification :	NA
13. Compliance Report and Plan :	NA
14. Compliance Statement (Hard-copy Required) :	NA

III. EMISSIONS UNIT INFORMATION

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Information Section 1

Blast Furnace

Type of Emissions Unit Addressed in This Section

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

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

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

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

Emissions Unit Information Section 1

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Blast Furnace		
2. ARMS Identification Number : 1, 4, 6		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? N	5. Emissions Unit Major Group SIC Code : 33
6. Initial Startup Date : 12/ 1/84		
7. Long-term Reserve Shutdown Date :		
8. Package Unit : Manufacturer : Model Number :		
9. Generator Nameplate Rating : MW		
10. Incinerator Information : Dwell Temperature : °F Dwell Time : seconds Incinerator Afterburner Temperature : °F		
11. Emissions Unit Comment : This emission unit includes the furnace exhaust (ID 01), tapping (ID 04), and charging (ID 06) operations.		

Emissions Unit Information Section 1

Blast Furnace

Emissions Unit Control Equipment 1

1. Description :

Existing baghouse on Furnace Exhaust (ID 01)

Mfr: assembled by Gulf Coast

Model: NA

Cleaning Mechanism: Shaker type

Air-To-Cloth Ratio: 0.63:1

Design Flow: 35,000 acfm (w/prop. afterburner)

Efficiency Rating: 99%

Outlet Temperature: 200 deg. F (w/prop. afterburner)

Pressure Drop: 1-7" H₂O

Cleaning Cycle Duration: 1 min.

Cleaning Cycle Frequency: 4x/day

Delay Periods: 35 mins.

Bag Material: 10 oz. Acrylic, snow filtration, sateen weave

2. Control Device or Method Code : 17

Emissions Unit Information Section 1

Blast Furnace

Emissions Unit Control Equipment 2

1. Description :

Existing baghouse on Tapping Hood (ID 04)

Mfr: assembled by Gulf Coast

Model: NA

Cleaning Mechanism: Shaker type

Air-To-Cloth Ratio: 1.45:1

Design Flow: 7,000 acfm

Efficiency Rating: 99%

Outlet Temperature: 100 deg. F

Pressure Drop: 1-4" H2O

Cleaning Cycle Duration: 2 mins.

Cleaning Cycle Frequency: 1x/day

Delay Periods: 24 hrs.

Bag Material: 10 oz. Acrylic, snow filtration, sateen weave

2. Control Device or Method Code : 18

Emissions Unit Information Section 1

Blast Furnace

Emissions Unit Control Equipment 3

1. Description :

Existing baghouse on Charging Hood (ID 04)

Mfr: assembled by Gulf Coast

Model: NA

Cleaning Mechanism: Shaker type

Air-To-Cloth Ratio: 1.21:1

Design Flow: 9,000 acfm

Efficiency Rating: 99%

Outlet Temperature: 100 deg. F

Pressure Drop: 1-4" H₂O

Cleaning Cycle Duration: 2 mins.

Cleaning Cycle Frequency: 1x/day

Delay Periods: 24 hrs.

Bag Material: 10 oz. Acrylic, snow filtration, sateen weave

2. Control Device or Method Code : 18

Emissions Unit Information Section 1

Blast Furnace

Emissions Unit Control Equipment 4

1. Description :

Proposed Feed Desulfurization System

Mfr.: M.A. Industries, Inc.

Model: M.A. 41

Efficiency Rating: 1% S content of total Pb feed to furnace
(see Appendix O)

2. Control Device or Method Code : 46

Emissions Unit Information Section 1

Blast Furnace

Emissions Unit Control Equipment 5

1. Description :

Proposed Afterburner on Furnace Exhaust (ID 01)

Mfr.: Not yet selected

Model: Not yet selected

Min. Chamber Temperature: 1400 deg. F

Retention Time: 0.5-2.0 secs.

Efficiency Rating: 90% for CO, 95% for VOCs

2. Control Device or Method Code : 21

Emissions Unit Information Section 1

Blast Furnace

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	15 mmBtu/hr	
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :	13000	
	Units :	lbs/hr
4. Maximum Production Rate :	7900	
	Units :	lbs/hr
5. Operating Capacity Comment :		

Emissions Unit Information Section 1

Blast Furnace

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :

24 hours/day

7 days/week

52 weeks/year

8760 hours/year

B. EMISSIONS UNIT REGULATIONS

Emissions Unit Information Section 1

Blast Furnace

Rule Applicability Analysis

40 CFR Part 60.122, Subpart L (NSPS)

40 CFR Part 52.535

17-2.650 (2)(b)1

17-2.500

17-2.700

C. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 1

Blast Furnace

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	Blast Furnace		
2. Emission Point Type Code :	1		
3. Descriptions of Emission Points Comprising this Emissions Unit :	Furnace Exhaust, ID 01, Tapping Hood, ID 04, Charging Hood, ID 06 It will be assumed that all pollutants exhaust through the main furnace exhaust baghouse, ID 01.		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :			
5. Discharge Type Code :	V		
6. Stack Height :	150	feet	
7. Exit Diameter :	3.0	feet	
8. Exit Temperature :	200	°F	
9. Actual Volumetric Flow Rate :	35000	acfm	
10. Percent Water Vapor :	3.50	%	
11. Maximum Dry Standard Flow Rate :	27020	dscfm	
12. Nonstack Emission Point Height :		feet	
13. Emission Point UTM Coordinates :			
Zone :	17	East (km) :	364.050 North (km) : 3093.550
14. Emission Point Comment :			
	The flow rate and temperature given are with the proposed afterburner.		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

Blast Furnace

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Lead scrap, coke, limestone, iron, and slag charged in furnace (emissions related to tons processed)	
2. Source Classification Code (SCC) :	
3. SCC Units : Tons Processed	
4. Maximum Hourly Rate : 6.500	5. Maximum Annual Rate : 56940
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur : 0.83	8. Maximum Percent Ash : 0.3
9. Million Btu per SCC Unit : 12	
10. Segment Comment : Sulfur content calculated by: lead scrap S content of 1% x 79.2% charge rate + coke S content of 0.58% x 7% charge rate = 0.79% + 0.04% = 0.83% Ash percent calculated by: Coke ash content of 5.4% x 7% charge rate: 0.38% Btu per SCC Unit calculated by: 13,000 Btu/lb coke x 2,000 lbs/ton = 26 mmBtu/ton coke 6.5 tons/hr charge rate x 7% coke = 0.455 tons/hr coke x 26mmBtu/ton coke = 11.83 mmBtu/ton charge (Btu's assumed only from coke)	

E. POLLUTANT INFORMATION

Emissions Unit Information Section 1

Blast Furnace

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : SO2		
2. Total Percent Efficiency of Control :		66.0 %
3. Primary Control Device Code :		046
4. Secondary Control Device Code :		
5. Potential Emissions :		520.0000 lb/hour 2277.6000 tons/year
6. Synthetically Limited? N		
7. Range of Estimated Fugitive/Other Emissions:		to tons/year
8. Emissions Factor : 80.00000 Units : lbs/ton charge Reference : AP-42		
9. Emissions Method Code :		3
10. Calculations of Emissions : 6.5 tons charge/hr (requested) x 80 lbs SO2/ton charge = 520 lbs SO2/hr 520 lbs/hr x 8,760 hrs/yr / 2,000 lbs/ton = 2,277.6 tons SO2/yr		
11. Pollutant Potential/Estimated Emissions Comment :		

DESCRIPTION

Emissions Unit Information Section 1

Blast Furnace

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code : OTHER
2. Future Effective Date of Allowable Emissions :
3. Requested Allowable Emissions and Units :
4. Equivalent Allowable Emissions : <p style="text-align: right;">175.0000 lb/hour 766.5000 tons/year</p>
5. Method of Compliance : <p>Annual source test with process rate within 10% of max., production records</p>
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : <p>Allowable emissions requested as BACT.</p>

E. POLLUTANT INFORMATION

Emissions Unit Information Section 1

Blast Furnace

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted :	PB	
2. Total Percent Efficiency of Control :	99.8 %	
3. Primary Control Device Code :	017	
4. Secondary Control Device Code :		
5. Potential Emissions :	2.0900 lb/hour	9.1500 tons/year
6. Synthetically Limited?	N	
7. Range of Estimated Fugitive/Other Emissions:		
	to	tons/year
8. Emissions Factor :		
Units :		
Reference :		
9. Emissions Method Code :		
10. Calculations of Emissions :		
11. Pollutant Potential/Estimated Emissions Comment :		
	Potential emissions are current permitted levels.	

DESCRIPTION

Emissions Unit Information Section 1

Blast Furnace

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code : ESCPSD
2. Future Effective Date of Allowable Emissions :
3. Requested Allowable Emissions and Units :
4. Equivalent Allowable Emissions : <p style="text-align: right;">0.1340 lb/hour 0.5900 tons/year</p>
5. Method of Compliance : <p>Annual source test with process rate within 10% of max., production records</p>
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :

E. POLLUTANT INFORMATION

Emissions Unit Information Section 1

Blast Furnace

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted :	PM		
2. Total Percent Efficiency of Control :	99.8 %		
3. Primary Control Device Code :	017		
4. Secondary Control Device Code :			
5. Potential Emissions :	3.2000 lb/hour	14.0200 tons/year	
6. Synthetically Limited?	N		
7. Range of Estimated Fugitive/Other Emissions:		to	tons/year
8. Emissions Factor :			
Units :			
Reference :			
9. Emissions Method Code :			
10. Calculations of Emissions :			
11. Pollutant Potential/Estimated Emissions Comment :	Potential emissions are current permitted levels.		

E. POLLUTANT INFORMATION

Emissions Unit Information Section 1

Blast Furnace

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted :	CO
2. Total Percent Efficiency of Control :	90.0 %
3. Primary Control Device Code :	021
4. Secondary Control Device Code :	
5. Potential Emissions :	683.3200 lb/hour 2292.9400 tons/year
6. Synthetically Limited?	N
7. Range of Estimated Fugitive/Other Emissions:	to tons/year
8. Emissions Factor :	
Units :	
Reference :	
9. Emissions Method Code :	1
10. Calculations of Emissions :	
11. Pollutant Potential/Estimated Emissions Comment :	
	Based on October 21 and November 4, 1991 source test.

DESCRIPTION

Emissions Unit Information Section 1

Blast Furnace

Pollutant Information Section 4

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER	
2. Future Effective Date of Allowable Emissions :		
3. Requested Allowable Emissions and Units :		
4. Equivalent Allowable Emissions :	68.3310 lb/hour	299.2900 tons/year
5. Method of Compliance :	Maintenance of afterburner temperature and residence time.	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :	Allowable emissions requested as BACT.	

E. POLLUTANT INFORMATION

Emissions Unit Information Section 1

Blast Furnace

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted :	NOX		
2. Total Percent Efficiency of Control :	%		
3. Primary Control Device Code :			
4. Secondary Control Device Code :			
5. Potential Emissions :	1.9800 lb/hour	8.6700 tons/year	
6. Synthetically Limited?	N		
7. Range of Estimated Fugitive/Other Emissions:		to	tons/year
8. Emissions Factor :			
Units :			
Reference :			
9. Emissions Method Code :	1		
10. Calculations of Emissions :			
11. Pollutant Potential/Estimated Emissions Comment :	Based on October 21, 1991 source test.		

E. POLLUTANT INFORMATION

Emissions Unit Information Section 1

Blast Furnace

Pollutant Potential/Estimated Emissions : Pollutant 6

1. Pollutant Emitted :	VOC	
2. Total Percent Efficiency of Control :	95.0 %	
3. Primary Control Device Code :	021	
4. Secondary Control Device Code :		
5. Potential Emissions :	33.1010 lb/hour	144.9799 tons/year
6. Synthetically Limited?	N	
7. Range of Estimated Fugitive/Other Emissions:		to tons/year
8. Emissions Factor :		
Units :		
Reference :		
9. Emissions Method Code :	1	
10. Calculations of Emissions :		
11. Pollutant Potential/Estimated Emissions Comment :	Based on October 21, 1991 source test.	

F. VISIBLE EMISSIONS INFORMATION

Emissions Unit Information Section 1

Blast Furnace

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	VE
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
	Normal Conditions : %
	Exceptional Conditions : %
	Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance :	
5. Visible Emissions Comment :	
	40 CFR 52.535 (c)(1)(ii), (iii), and (iv)

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

Emissions Unit Information Section 1

Blast Furnace

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

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

2. Increment Consuming for Nitrogen Dioxide?

-] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

-] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

-] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

-] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

-] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :			
PM :	U		
SO2 :	C		
NO2 :	U		
4. Baseline Emissions :			
PM :		lb/hour	tons/year
SO2 :	316.6669	lb/hour	1387.0000 tons/year
NO2 :			tons/year
5. PSD Comment :			

I. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 1

Blast Furnace

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Figure 1.3
2. Fuel Analysis or Specification :	in Section 6.0
3. Detailed Description of Control Equipment :	Appendix O
4. Description of Stack Sampling Facilities :	Appendix D
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :	NA
11. Alternative Modes of Operation (Emissions Trading) :	NA
12. Enhanced Monitoring Plan :	NA

Material Safety Data Sheet

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072



IDENTITY (As Used on Label and List) CAS No. 65996-77-2
Metallurgical Coke

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name ABC Coke Division, Drummond Co., Inc.	Emergency Telephone Number (205) 849-1330 Alabama (800) 523-8661 Other (800) 321-4015
Address (Number, Street, City, State, and ZIP Code) P.O. Box 170189	Telephone Number for Information Same as above
Birmingham, Ala 35217	Date Prepared 5/7/86
	Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity, Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Carbon	N/A	N/A	N/A	93 - 94
Ash	N/A	N/A	N/A	5 - 6
Sulfur	N/A	N/A	N/A	0.5 - 0.6

Section III — Physical/Chemical Characteristics

Boiling Point	N/A	Specific Gravity (H ₂ O = 1)	1.92
Vapor Pressure (mm Hg.)	N/A	Melting Point	N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate = 1)	N/A
Solubility in Water	NIL		
Appearance and Odor	Irregular dark gray lumps. No distinguishing odor.		

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used) Ignition temperature approx. 1,000°F	Flammable Limits	LEL N/A	UEL N/A
Extinguishing Media Water			
Special Fire Fighting Procedures None			
Unusual Fire and Explosion Hazards None known			

13. Identification of Additional Applicable Requirements : NA

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

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

**AIR QUALITY APPLICATION
PREVENTION OF SIGNIFICANT DETERIORATION
FROM THE MODIFICATION OF A
BATTERY RECYCLING FACILITY**

RECEIVED

OCT 11 1995

BUREAU OF
AIR REGULATION

Prepared for

**GULF COAST RECYCLING, INC.
TAMPA, FLORIDA**

Permit Number AO29-173310

Revised October 1995

*Revised
App. submitted
following
"INTENT TO DENY"*

Prepared by

Lake Engineering, Inc.
35 Glenlake Parkway
Suite 500
Atlanta, Georgia 30328

Telephone (770) 395-0464
Fax (770) 395-0474

460.20001

CONTENTS

1.0	INTRODUCTION	1
1.1	PROCESS DESCRIPTION	1
1.2	PSD APPLICABILITY	4
2.0	BEST AVAILABLE CONTROL TECHNOLOGY REVIEW	6
2.1	SULFUR DIOXIDE	6
2.1.1	Dry Scrubbing	9
2.1.2	Wet Scrubbing	12
2.1.3	Desulfurization	16
2.1.4	Sulfur Dioxide Conclusions	20
2.2	LEAD	21
2.3	TOTAL PARTICULATES	22
2.4	CARBON MONOXIDE	22
2.4.1	Catalytic Oxidation	23
2.4.2	CO Waste-Heat Boiler	23
2.4.3	Afterburner/Incineration	24
2.4.4	Carbon Monoxide Conclusions	24
2.5	NITROGEN OXIDES	25
2.6	VOLATILE ORGANIC COMPOUNDS	25
3.0	BASELINE DATA	27
3.1	AMBIENT MONITORING DATA SUMMARY	27
3.2	SURROUNDING SOURCE EMISSION INVENTORY	27
4.0	DISPERSION MODELING ANALYSIS	28
4.1	PROTOCOLS AND RESULTS	28
4.1.1	SO ₂ Florida Ambient Air Quality Standards (FAAQS) Analysis	30
4.1.2	SO ₂ Class I Increment Analysis	33
4.1.3	SO ₂ Class II Increment Analysis	35
4.1.4	CO Screening Analysis	36
4.2	MODELING SUMMARY	37
5.0	EFFECTS ON AIR QUALITY RELATED VALUES (AQRVs)	38
5.1	INDUCED GROWTH ANALYSIS	38
5.2	IMPACTS ON SOILS AND VEGETATION	38
5.3	IMPACTS ON VISIBILITY	42
6.0	APPLICATION FORMS	49
7.0	SUMMARY AND CONCLUSIONS	62

CONTENTS (con't)

FIGURES

FIGURE 1.1	Area Map
FIGURE 1.2	Site Map
FIGURE 1.3	Flow Diagram
FIGURE 4.1	Wind Rose

TABLES

TABLE 2.1	Emissions Summary
TABLE 4.1	FAAQS Analysis Results
TABLE 4.2	Class I Increment Analysis Results
TABLE 4.3	Class II Increment Analysis Results
TABLE 4.4	CO Screening Analysis Results
TABLE 5.1	SO ₂ Exposure Sensitivity Groupings
TABLE 5.2	SO ₂ Exposure Study on White Pine
TABLE 5.3	Visual Effects Screening Analysis Summary
TABLE 5.4	Visual Effects Screening Analysis Delta E Results
TABLE 5.5	Visual Effects Screening Analysis Contrast Results

APPENDICES

APPENDIX A	Current Operating Permit No. AO29-173310
APPENDIX B	EPA Memo Regarding PSD Applicability
APPENDIX C	Letter from City of Tampa to Gulf Coast Regarding Sewer Capacity
APPENDIX D	1991 Lead Source Test
APPENDIX E	1991 NO _x , VOC, and CO Source Test
APPENDIX F	SCAQMD CO BACT Determination
APPENDIX G	Modeling Protocol
APPENDIX H	Approved Modeling Protocol
APPENDIX I	AAQS SO ₂ Modeling Source Inventory
APPENDIX J	Letter from DEP to Lake Engineering Regarding Background Values
APPENDIX K	Class I SO ₂ Modeling Source Inventory ⁸
APPENDIX L	Class I Modeling Summary
APPENDIX M	Class II SO ₂ Modeling Source Inventory
APPENDIX N	Modeling Input and Output Files on Diskette
APPENDIX O	Desulfurization System Manufacturer's Specifications
APPENDIX P	Afterburner Destruction Efficiency Curve

1.0 INTRODUCTION

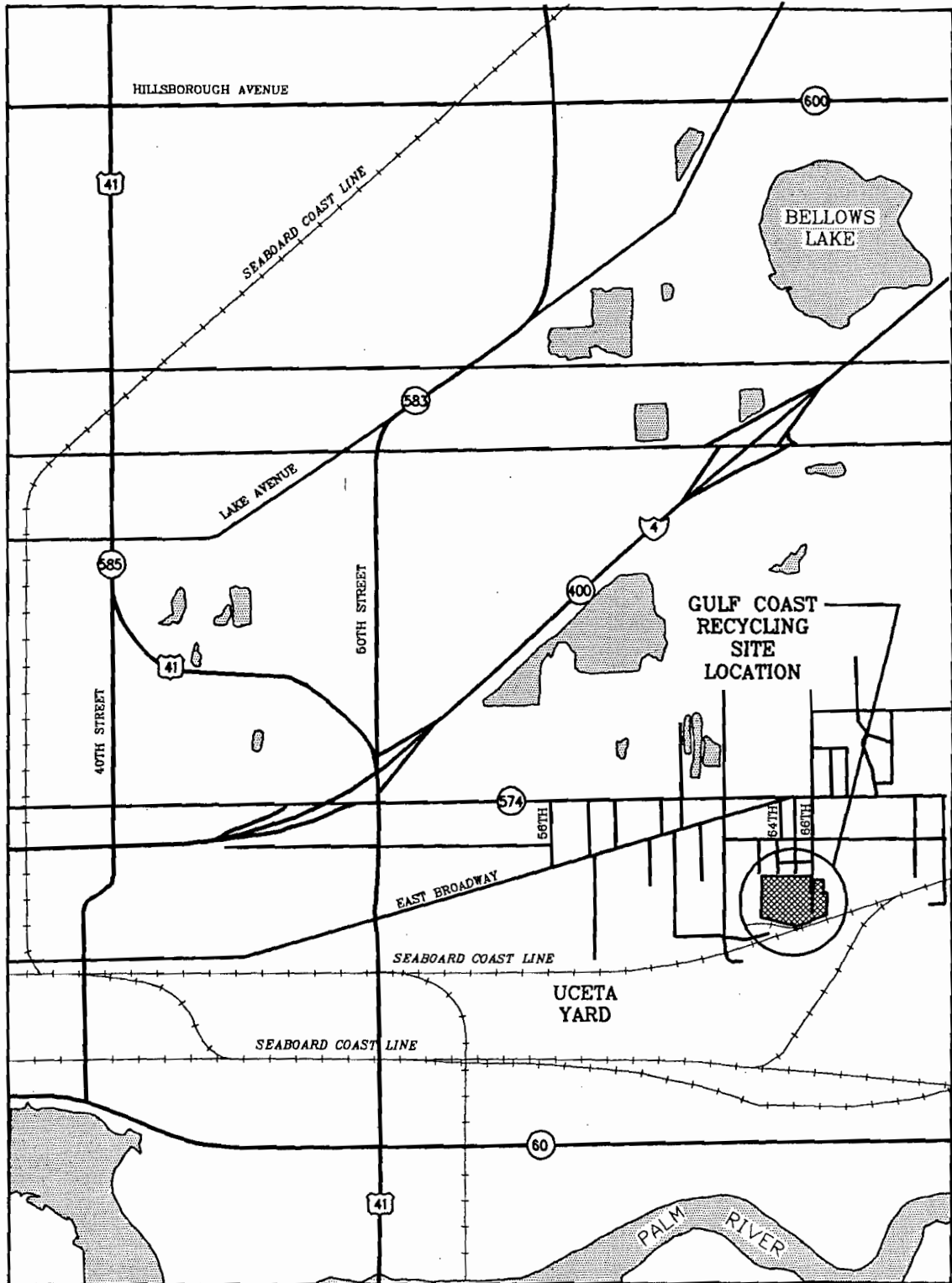
Gulf Coast Recycling, Inc. ("Gulf Coast") is herein making application to the Florida Department of Environmental Protection (DEP) for a Construction Permit to modify a battery recycling facility located southeast of the intersection of Interstate 4 and U.S. Highway 41 in the city of Tampa, Hillsborough County, Florida. The site is depicted on **Figures 1.1 and 1.2**. Based on the emission levels and the location involved, the permitting of this source is subject to the USEPA requirements of 40 CFR §51.166 "Prevention of Significant Deterioration" (PSD) and the corresponding Florida Air Quality Regulations Rule 17-2.500.

This document describes the anticipated air quality impacts from, and the air pollution control techniques used in, the modification of Gulf Coast's facility. It presents a technical demonstration that this modification, which consisted of the replacement of two existing blast furnaces with one furnace 25 percent larger, has and will comply with all applicable state and federal air pollution control regulations. This demonstration generally uses conservative estimates and values regarding control efficiencies and estimates of impacts for purposes of presenting a worst-case scenario. Actual impacts are expected to be significantly less than the projected estimates contained herein.

The actual startup of the new furnace took place in late 1984. This furnace was first permitted on January 28, 1985 by permit number AO29-95366, later by permit number AO29-173310 on July 17, 1990, and finally by amended permit number AO29-173310 on November 19, 1990 (see **Appendix A**). This latter permit expires on November 15, 1995. At the time of the modification it was determined by DEP that no PSD review was required. Subsequent events have, however, determined that a PSD review was applicable and that a full PSD analysis needs to be performed retroactively (see **Appendix B**). The history of the exhaustive permitting process for this modification can be found in the "After-the-Fact Construction Application" previously submitted on February 10, 1992.

1.1 PROCESS DESCRIPTION

In the battery recycling process, discarded automotive and industrial lead-acid storage batteries are crushed and mechanically separated into their component fractions. In this process, the sulfuric acid is drained and neutralized while the plastic casings are segregated and shipped



460-010 1=1 04-14-84 BKE 460.20001

AREA MAP GULF COAST RECYCLING, INC. TAMPA, FLORIDA



FIGURE 1.1

DRAINAGE DITCH

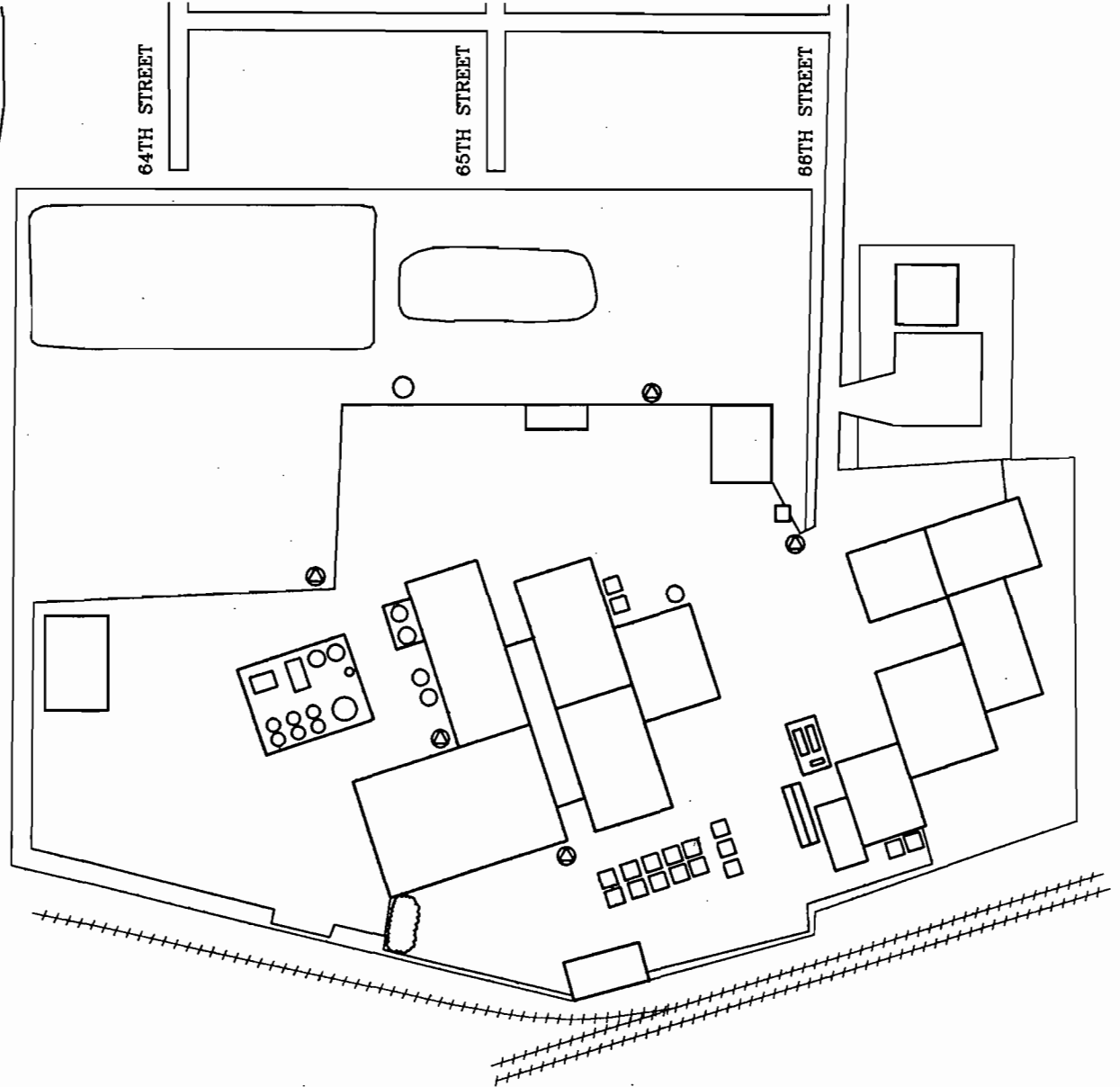
64TH STREET

65TH STREET

66TH STREET

LEGEND

⊙ COLLECTION SUMPS
STORMWATER AND
WASHDOWN WATER



SITE MAP

GULF COAST RECYCLING, INC.

FIGURE 1.2

off-site for further processing and eventual resale. The lead-bearing components are then fed into the blast furnace for lead recovery. The lead is then refined further and eventually combined with alloying metals in refining kettles to produce finished lead alloys meeting customer specifications. Finished lead from the kettles is cast into ingots for shipment and eventual re-use. The major source of air pollution at the facility is the blast furnace which burns metallurgical coke in the smelting of lead scrap. Exhaust gases are emitted to the atmosphere through an existing baghouse and stack. It is this blast furnace which is the subject of this application. A simplified flow diagram is shown on **Figure 1.3**.

1.2 PSD APPLICABILITY

PSD regulations seek to protect areas in which the ambient air quality is better than the federally-established health-related National Ambient Air Quality Standards (NAAQS). Florida has established lower ambient standards than the federal standards. They will be referred to as the Florida Ambient Air Quality Standards (FAAQS). Sources are considered "major stationary sources" and are subject to the PSD regulations if they fall into either one of the following two categories: (1) One of the 28 specific categories of industries specified in Title 40 of CFR Part 51.166 (b)(1)(i)(a) and with the "potential" to emit more than 100 tons/yr of a regulated pollutant; or, (2) Any source with the "potential" to emit 250 tons or more/yr of a regulated pollutant.

Pollutants emitted from the new blast furnace include lead (Pb), sulfur dioxide (SO₂), carbon monoxide (CO), particulate matter (PM), nitrogen oxides (NO_x), and volatile organic compounds (VOCs). The Gulf Coast facility is considered a secondary lead smelter which is one of the 28 specific categories mentioned above (secondary metal production plants). PSD regulations also establish "significant" or "de minimis" levels for all regulated pollutants. For "major" sources, these "significant" levels determine applicability of PSD review for all pollutants emitted.

Once a facility is determined to be "major" for one pollutant (either the 100 or 250 tons/yr limit described above), then a PSD review must also be done for all other pollutants that have the "potential" to exceed the significant levels. Gulf Coast Recycling was already considered a "major" source due to its existing CO and SO₂ emission levels being greater than 100 tons/yr. It was subsequently determined that the CO and SO₂ emissions increases associated with the replacement of the blast furnace exceeded the 100 and 40 tons/yr significance levels. This made the modification subject to PSD review.

FLOW DIAGRAM

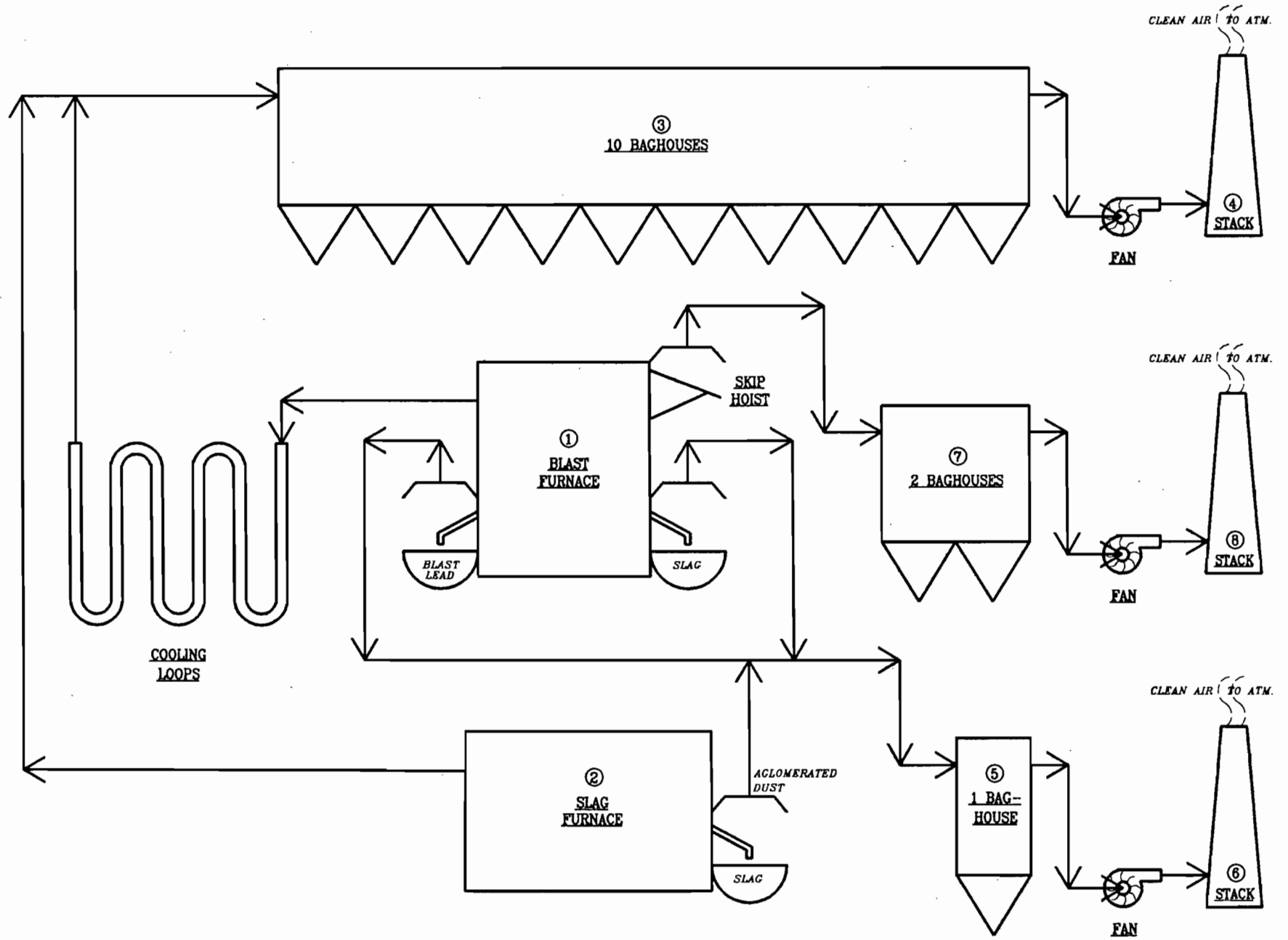


FIGURE 1.3

2.0

BEST AVAILABLE CONTROL TECHNOLOGY REVIEW

All affected emissions units, regardless of size, must undergo a Best Available Control Technology (BACT) analysis. However, in light of the criterion of economic reasonableness, an analysis should only be as extensive as the quantity of pollutants emitted and the ambient air impacts created. Experience has shown that facilities that emit small amounts of pollutants have extremely high costs associated with the installation and operation of highly effective emission controls. This section describes and quantifies emissions from the new blast furnace and performs a BACT review for each applicable pollutant. A "top-down" BACT review identifies all reasonable control technologies and analyzes them for control efficiency and environmental, energy, and economic impacts. This analysis is performed for each identified technology in order of control efficiency. If the first technology (highest control efficiency) is not chosen an indication, e.g., cost prohibitiveness, of why it was not chosen must be given.

An emissions summary is presented in **Table 2.1**. The only source associated with this modification is the new blast furnace. Since it has been in operation for about nine years, there are good source test data available. There are three distinct operations associated with the furnace. In addition to the basic *smelting* there is *charging*, when raw material is being added to the furnace, and *tapping*, when the molten lead is tapped from the furnace. All operations are included in the blast furnace total emissions.

2.1 SULFUR DIOXIDE

The primary source of SO₂ is from the furnace exhaust where sulfur-containing lead paste (along with various other material including coke, limestone, and slag) are smelted. Gulf Coast is currently permitted for a maximum SO₂ emission rate of 384.2 lbs/hr and 7,800 hours/yr. This permitted rate has been complied with through operational practices such as enhanced furnace temperature and column height adjustments and feed separation (controlling the ratio of high- versus low-sulfur feed material in the furnace charge). However, for control technology evaluation purposes, the potential to emit for this furnace will be based on the AP-42 emission factor for reverberatory furnaces of 80 lbs/ton processed. The AP-42 factor for blast furnaces is 53 lbs/ton. However, this assumes a blast and reverberatory furnace configuration where the blast furnace is charged with reverb furnace slag, which already has a reduced sulfur content.

PSD APPLICABILITY FOR NEW BLAST FURNACE

values are in tons/year

P O L L	CURRENT ACTUAL EMISSIONS (7,800 hrs/yr)	CURRENT POTENTIAL EMISSIONS (8,760 hrs/yr)	OLD FURNACE POTENTIAL EMISSIONS (8,760 hrs/yr)	POTENTIAL EMISSIONS INCREASE	PSD SIGNIF. LEVEL	PSD TRIP?	EMISSION REDUCTION W/ CONTROLS ⁸	PROPOSED ALLOWABLE EMISSIONS ¹²
SO ₂	1,458.60 ¹	2,277.60 ⁵	1,387.00	890.60	40	YES	1,511.10	766.50 ¹¹
Pb	0.023 ²	0.59 ⁶	6.69	-6.10	0.6	NO	0.00	0.59
PM	12.48 ³	14.02	9.51	4.51	15	NO	0.00	14.02
CO	2,664.95 ⁴	2,992.94 ⁴	1,774.00	1,218.94	100	YES	2,693.65 ⁹	299.29
NO _x	7.72 ⁴	8.67 ⁴	5.14	3.53	40	NO	0.00	8.67
VOC	129.09 ⁴	144.98 ⁴	85.91	59.07	40	N/A ⁷	137.73 ¹⁰	7.25

- ¹ Based on December 1983 baseline determination source test (374 lbs/hr) *374 x 7800 / 2000 = 1458.6*
- ² Based on October 24, 1991 source test (0.006 lbs/hr)
- ³ Based on October 24, 1991 source test (0.167 lbs/ton charge)
- ⁴ Based on October 21, November 4, 1991 source tests
- ⁵ Based on AP-42 uncontrolled emission factor of 80 lbs/ton and requested production limit of 6.5 tons/hr
- ⁶ Based on requested limit of 0.134 lbs/hr
- ⁷ Surrounding area classified as non-attainment for ozone (VOCs), PSD not applicable
- ⁸ Desulfurization for SO₂ and afterburner for CO and VOCs
- ⁹ Based on a design destruction efficiency of 90%
- ¹⁰ Based on a design destruction efficiency of 95%
- ¹¹ Based on requested allowable emission rate of 175 lbs/hr for 8,760 hrs/yr
- ¹² Does not include products of combustion generated by the afterburner

"Potential means controlled vs. uncontrolled"

Gulf Coast's configuration consists of a blast furnace only. Therefore, the reverb factor of 80 lbs/ton will be used. This results in potential emissions of:

$$80 \frac{\text{lbs } SO_2}{\text{ton processed}} \times 6.5 \frac{\text{tons processed}}{\text{hr}} (\text{requested}) = 520 \frac{\text{lbs } SO_2}{\text{hr}}$$

$$\frac{520 \frac{\text{lbs } SO_2}{\text{hr}} \times 8,760 \frac{\text{hrs}}{\text{yr}}}{2,000 \frac{\text{lbs}}{\text{ton}}} = 2,277.60 \frac{\text{tons } SO_2}{\text{yr}}$$

note: Gulf Coast requested to increase its allowable annual operating hours to 8,760 hours/yr in the original PSD application in May 1994 and to increase its allowable process rate by letter dated August 29, 1995.

The installation of the new blast furnace increased emissions above the 40 tons/yr significance level for SO₂ and subsequently made PSD/BACT applicable for this pollutant. As stated previously, the blast furnace is the primary source of SO₂ emissions and therefore this blast furnace will be the focal point of the BACT analysis. This analysis will attempt to discuss a representative sample of control technologies for SO₂ removal while evaluating the environmental, energy, and economic impacts of each.

Nearly twenty different types of flue gas desulfurization systems (FGDs) have been developed over the years, each of which removes SO₂ from the flue gas by an absorption process. For convenience, FGDs are classified either as "throwaway" or "regenerable," depending on whether the absorber product is treated to recover the reagents or simply disposed. Furthermore, it would not be feasible in this analysis to evaluate the advantages and disadvantages of each and every scrubbing alternative available on the market today. The selection of a specific process as the ideal one would be virtually impossible since so many factors are involved: capital investment, construction costs, operating costs, reagent costs, waste treatment, stabilization, disposal, and possible by-product reclaim.

The New Source Performance Standards (NSPS) concerning this industry do not address SO₂ emissions due to the variation and cost of controlling them. For purposes of this analysis, three representative control strategies that have been proven in reducing potential SO₂ emissions have been selected for a detailed evaluation: dry lime slurry injection (dry scrubbing), wet limestone scrubbing (wet scrubbing), and front-end feed desulfurization.

2.1.1 Dry Scrubbing

In a semi-dry process, the exhaust flue gas from the furnace's metallurgical baghouse and a lime slurry are mixed in a spray dryer. The lime then reacts with and absorbs the sulfur dioxide components in the gas stream forming sulfur-bearing particulates. Baghouses are excellent devices for controlling particulates, including lead. For this reason, the metallurgical baghouse catch is rich in lead and is typically cycled back into the furnace for reprocessing.

There are some process-related constraints concerning dry scrubbing inherent in Gulf Coast's current operation. If a dry scrubber were to precede the metallurgical baghouse, the sulfate particles would contaminate the lead catch and would also be recycled back into the furnace, which would increase the potential for increased SO₂ loading. The only logical solution is to follow the dry scrubbing system with an additional baghouse including a segregated hopper/receiving bin. The collected particulates from this secondary baghouse could not be recycled through the furnace but would likely have to be classified as a hazardous waste and transported to a certified landfill. Historical control efficiencies for this particular type of control technology range from 75-95 percent. The following economic impact analysis is based on an overall removal efficiency of 90 percent.

Economic Impact Analysis (Dry Scrubbing)

Design Parameters:

Flow rate:	24,300 acfm
SO ₂ Emission Rate:	520 lbs/hr
Temperature:	154°F
Removal Efficiency:	90%
Expected Life of Equipment:	10 years

Capital Investment¹:

Control Equipment ² (delivered):	\$ 506,250
Site Preparation ³ /Installation:	<u>\$ 300,000</u>
Total:	\$ 806,250

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.

³ Installation includes: engineering design, site preparation, erection, field management, startup, etc.

Annual Costs

Operating Labor and Supervision:	\$ 15,000
Maintenance and Repairs:	\$ 15,200
Power and Utilities:	\$ 129,441
Depreciation @ 10%/yr:	\$ 80,625
Disposal Cost:	<u>\$ 608,750</u>
Total:	\$ 849,016

Annualized SO₂ Removal Calculation

Inlet Emission Rate:	520 lbs/hr
Removal Efficiency:	90%
Total SO ₂ Removed:	468 lbs/hr
Hours of Operation:	8,760 hours (requested)
Annual Reduction:	2,050 tons/yr
Net Annual Cost:	\$ 849,016
Net Ann Cost/Ton SO ₂ Removed:	\$ 414/ton
Capital Cost:	\$ 806,250
Capital Cost/Ton SO ₂ Removed:	\$ 393/ton

Control Technology Costing Calculations

1. Cost of Dry Scrubbing Reagent (lime)

$$88 \text{ lbs/hr of lime} \times \$ 75/\text{ton} \div 2,000 \text{ lbs/ton} \times 8,760 \text{ hrs/yr} = \$ 28,908/\text{yr}$$

2. Cost of Handling and Disposal of Hazardous Waste (\$ 250/ton)

$$(2,050 \text{ tons/yr of SO}_2 \text{ removed} + 385 \text{ tons/yr of lime}) \times \$ 250/\text{ton} = \$ 608,750/\text{yr}$$

3. Power Requirements for Pollution Control System

Booster Fan/Motor, Process Req., Instrumentation, Air Compressor, etc = 342 hp

$$342 \text{ hp} \times 745.7 \text{ watts/hp} \div 1000 \text{ watts/kW} = 255 \text{ kW/hr}$$

$$255 \text{ kW/hr} \times \$ 0.045/\text{kW} \times 8,760 \text{ hrs/yr} = \$100,533/\text{yr}$$

Product Costs

Avg. annual pounds of lead produced/sold:	49,415,000 (@ 8,760 hrs/yr)
Annual cost of scrubbing system:	\$ 849,016
Cost per pound of lead produced:	\$ 0.0172
Current price received for lead:	\$ 0.30/lb
Percent of gross income from product sales spent on scrubber system:	5.73%

The economic impact of this technology is estimated above at \$414/ton of SO₂ removed. Due to the relatively low throughput of this facility, it is also estimated that 5.73 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 (Dry 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 255 kW or 1.99 million kWh/yr. It has been estimated that the 255 kW electrical demand, for this subject control system, would require an equivalent heat value of 870,672 Btu/hr or approximately 69.6 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 (Dry Scrubbing)

In conjunction with the additional cost for power, the incremental SO₂ increase associated with the power production phase and the solid waste disposal requirements must also be considered. To provide the 255 kW needed to operate this system, it was estimated above that 271.4 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 13,027 lbs of SO₂/yr.

It was estimated above that approximately 2,435 tons of sulfur-bearing particulates would be generated each year. These particulates would likely be classified as a hazardous waste and buried in a certified 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. 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 SO_2 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 SO_2 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
SO ₂ Emission Rate:	520 lbs/hr
Temperature:	154°F
Removal Efficiency:	90%
Expected life of equipment:	10 years

Capital Investment¹:

Control Equipment ² (delivered):	\$ 530,100
Site Preparation/Installation ³ :	<u>\$ 570,000</u>
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.

³ 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:	<u>\$ 2,178,250</u>
Total:	\$ 2,444,690

Annualized SO₂ Removal Calculation

Inlet Emission Rate:	520 lbs/hr
Removal Efficiency:	90%
Total SO ₂ 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 SO ₂ Removed:	\$ 1,193/ton
Capital Cost:	\$ 1,100,100
Capital Cost/Ton SO ₂ Removed:	\$ 537/ton

Control Technology Costing Calculations

1. Cost of Wet Scrubbing Reagent (limestone)

$$174 \text{ lbs/hr of limestone} \times \$ 75/\text{ton} \div 2,000 \text{ lbs/ton} \times 8,760 \text{ hrs/yr} = \$ 57,159/\text{yr}$$

2. Cost of Handling and Disposal of Hazardous Waste = \$ 250/ton

For every ton of SO₂ removed, 4.25 tons of sludge are generated

$$2,050 \text{ tons of SO}_2 \text{ removed/yr} \times 4.25 \text{ tons of sludge generated} = 8,713 \text{ tons of sludge/yr}$$

$$8,713 \text{ tons sludge/yr} \times \$250/\text{ton} = \$ 2,178,250/\text{yr}$$

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

$$165 \text{ hp} \times 745.7 \text{ watts/hp} \div 1,000 \text{ watt/kW} = 123 \text{ kW/hr}$$

$$123 \text{ kW/hr} \times \$0.045/\text{kW} \times 8,760 \text{ hrs/yr} = \$48,503/\text{yr}$$

4. Fresh Water Requirements

$$15 \text{ gallons/min} \times 60 \text{ min/hr} \times 8,760 \text{ hrs/yr} \times \$ 2.00/1000 \text{ gals} = \$ 15,768/\text{yr}$$

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)

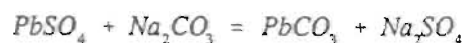
In conjunction with the additional cost for power, the incremental SO₂ increase associated with the power production phase and the solid waste disposal requirements must also be considered. To provide the 123 kW needed to operate this system, it was estimated above that 165 additional tons of coal would 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 SO₂/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.

2.1.3 Desulfurization

Desulfurization removes the sulfur contained in the furnace feed material before it is fed into the furnace. The sulfur-bearing paste (lead sulfate) from the batteries is not sent directly to the smelting furnace, but rather is first chemically reacted with sodium carbonate (soda ash) to remove most of the sulfur. This reaction results in lead carbonate and sodium sulfate. Following is the reaction that takes place:



Manufacturer's specifications on the proposed system may be found in Appendix O. The desulfurized paste is then fed into the furnace where as much as a 98% reduction can be realized in potential sulfur dioxide emissions. Rather than relying on the exclusive use of add-on pollution control devices, this technology can achieve equivalent reductions in emissions based on modifications of the conventional lead recovery process through such means as material separation and desulfurization. Presently, there are three new lead recovery plants operating in this country which have successfully demonstrated the technological effectiveness of desulfurization as a viable means of minimizing SO₂ emissions (including one in Region IV now being brought on-line). In all cases desulfurization was the accepted control methodology for SO₂ emissions and no add-on controls were required.

Gulf Coast is expecting to be able to reduce the sulfur content of the incoming lead scrap to 1% with the desulfurization system being proposed for installation. This 1% sulfur content is dependent upon the initial sulfur content entering the system (as with many pollution control systems the efficiency increases with the inlet concentration of the subject pollutant). Based on this technology Gulf Coast is requesting an allowable emission rate of 175 lbs/hr. This rate is based on potential SO₂ emissions that may be generated from the sulfur that may remain in the lead scrap after the desulfurization process and from the sulfur content in the coke which is used as fuel. This requested emission rate is an upper bound of the expected range. Emissions of SO₂ will fluctuate somewhat depending on the sulfur content of the incoming feed material which is also highly variable.

The majority of Gulf Coast's incoming feed material is spent lead-acid batteries where most of the sulfur content in the battery has been transformed from sulfuric acid to lead sulfate. Since the acid remaining in the batteries is drained upstream of the desulfurization system this

scenario will produce the upper bound of SO₂ emissions, since the majority of the sulfur in the battery is in the form of lead sulfate which is sent to the desulfurization process. However, a smaller percentage of the incoming batteries are relatively new defect batteries with most of the sulfur still being in the form of sulfuric acid. This results in less sulfur being sent to the desulfurization system and ultimately the furnace. The 175 lbs/hr is calculated as follows:

From lead scrap:

$$6.5 \frac{\text{tons processed}}{\text{hr}} \times 2,000 \frac{\text{lbs}}{\text{ton}} = 13,000 \frac{\text{lbs processed}}{\text{hr}} \times 80\% \text{ Pb scrap} = 10,400 \frac{\text{lbs Pb scrap}}{\text{hr}}$$

$1\frac{1}{2}\% \text{ S: } 104(1.5) = 156 \text{ lb/hr}$
 $1\% \text{ S: } \frac{104}{2} = 52 \text{ lb/hr}$
 $\frac{52}{104} = 50\%$

$$10,400 \frac{\text{lbs Pb scrap}}{\text{hr}} \times 1\% \text{ S} = 104 \frac{\text{lbs S}}{\text{hr}} \text{ into furnace}$$

AFTER DESULFURIZATION

$\frac{104}{.33} = 315 \text{ lb S into desulf. unit}$
 $\frac{315}{10,400} = 3\% \text{ S}$

$$104 \frac{\text{lbs S}}{\text{hr}} \text{ into furnace} \times (1 - 20\%)^A = 83.20 \frac{\text{lbs S}}{\text{hr}} \text{ out of furnace}$$

$$83.20 \frac{\text{lbs S}}{\text{hr}} \text{ out of furnace} \times 2^B = 166.40 \frac{\text{lbs SO}_2}{\text{hr}} \text{ out of furnace}$$

From coke:

$$910 \frac{\text{lbs coke}}{\text{hr}} \times 0.58\% \text{ S} = 5.3 \frac{\text{lbs S}}{\text{hr}}$$

$$5.3 \frac{\text{lbs S}}{\text{hr}} \text{ into furnace} \times (1 - 20\%)^A = 4.24 \frac{\text{lbs S}}{\text{hr}} \text{ out of furnace}$$

$$4.24 \frac{\text{lbs S}}{\text{hr}} \text{ out of furnace} \times 2^B = 8.48 \frac{\text{lbs SO}_2}{\text{hr}} \text{ out of furnace}$$

Total from lead scrap and coke:

$$166.40 \frac{\text{lbs SO}_2}{\text{hr}} + 8.48 \frac{\text{lbs SO}_2}{\text{hr}} = 174.88 \frac{\text{lbs SO}_2}{\text{hr}}$$

^A This factor takes into account that approximately 20% of the sulfur in the furnace will become fixed in the slag and will not be transformed into SO₂ and emitted as gaseous emissions.

^B One lb of Sulfur becomes 2 lbs of SO₂ due to the doubling of molecular weights:
 S = 16, O = 8; therefore, SO₂ = 16 + (8 x 2) = 32

Economic Impact Analysis (Desulfurization)

To quantify the economic impacts of the proposed desulfurization process would prove to be a difficult task since it is an integral part of the overall battery recycling process. It would suffice to say that the capital expenditure for this process is substantial and has been estimated, since this is an existing plant, at roughly \$2 million. However, it^t would not be justifiable to assign 100 percent of this expenditure to the traditional cost-benefit analysis as typically required for BACT determinations. A practical budgetary estimate would assign a capital value of approximately \$1.7 million. Conservative emissions estimates have shown that approximately 1,511 tons of SO₂ will be removed on an annual basis. The associated capital cost-per-ton of SO₂ removal for this process will be approximately \$1,125 per ton.

on what basis?

Design Parameters:

Flow rate:	24,300 acfm
SO ₂ Emission Rate:	520 lbs/hr
Temperature:	154°F
Removal Efficiency:	66%
Expected Life of Equipment:	10 years

Capital Investment¹:

Control Equipment ² (delivered):	\$1,400,000
Site Preparation ³ /Installation:	<u>\$ 300,000</u>
Total:	\$1,700,000

¹ Quote from M.A. Industries, Inc., Peachtree City, Georgia

² Control equipment includes: feed conveyor, crusher, screening units, elutriator, metals and rubber/plastic classifiers, recirculation and surge tanks, air conveyor unit, reactor vessels, filter presses, instrumentation, delivery, etc.

³ Installation includes: engineering design, site preparation, erection, field management, startup, etc.

Annual Costs

Operating Labor and Supervision:	\$ 32,850
Maintenance and Repairs:	\$ 15,200
Utilities (elec. & water):	\$ 145,198
Depreciation @ 10%/yr:	\$ 170,000
Disposal Cost:	<u>\$ 0</u>
Total:	\$ 363,248

Annualized SO₂ Removal Calculation

Inlet Emission Rate:	520 lbs/hr	520
Removal Efficiency:	66%	- 345
Total SO ₂ Removed:	345 lbs/hr	175
Hours of Operation:	8,760 hours (requested)	
Annual Reduction:	1,511 tons/yr	
Net Annual Cost:	\$ 363,248	
Net Ann Cost/Ton SO ₂ Removed:	\$ 240/ton	
Capital Cost:	\$1,700,000	
Capital Cost/Ton SO ₂ Removed:	\$1,125/ton	

Control Technology Costing Calculations

1. Power Requirements for System

Total connected power = 272 hp

$272 \text{ hp} \times 745.7 \text{ watts/hp} \div 1000 \text{ watts/kW} = 203 \text{ kW/hr}$

$203 \text{ kW/hr} \times \$ 0.045/\text{kW} \times 8,760 \text{ hrs/yr} = \$80,023/\text{yr}$

2. Fresh Water Requirements

$62 \text{ gallons/min} \times 60 \text{ min/hr} \times 8,760 \text{ hrs/yr} \times \$ 2.00/1000 \text{ gals} = \$ 65,175/\text{yr}$

Product Costs

Avg. annual pounds of lead

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

Annual cost of system: \$ 363,248

Cost per pound of lead produced: \$ 0.0074

Current price received for lead: \$ 0.30/lb

Percent of gross income from product

sales spent on scrubber system: 2.45%

The economic impact of this technology is estimated above at \$240/ton of SO₂ removed. Due to the relatively low throughput of this facility, it is also estimated that 2.45 percent of gross income from product sales would be spent on the desulfurization system. Based on these costs, it is recommended that this technology be considered BACT for this particular application.

Energy Impact Analysis (Desulfurization)

The total power requirements were addressed in the economic analysis, as far as determining total annual cost for the operation of the system. It has been shown that the electrical requirements will be 203 kW or 1.78 million kW/yr. It has been estimated that the 203 kW electrical demand, for this subject system, would require an equivalent heat value of 693,123 Btu/hr or approximately 55 lbs of coal/hr at 12,500 Btu/lb. Although these energy requirements are higher than for wet scrubbing, the environmental benefits discussed below outweigh the higher energy requirements.

Environmental Impact Analysis (Desulfurization)

To provide the 203 kW needed to operate this system, it was estimated above that 241 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 11,563 lbs of SO₂/yr. The environmental benefits from this proposed control strategy will be such that SO₂ emissions will be controlled upwards of 67% with no additional waste stream, liquid or solid, generated as with all scrubbing systems. Due to these environmental benefits, Gulf Coast is selecting desulfurization as BACT for this project.

2.1.4 Sulfur Dioxide Conclusions

The primary function of this recycling facility is to recover lead from spent lead-acid batteries and then to sell this lead on the open market at a profit. As such point where the recovery costs equal or exceed the market price for lead, such a facility fails to substantiate its existence. Based on rough industry estimates, average plant operating costs vary from 16.8 to 19.6 cents per pound of refined lead. The current price of lead is approximately 30 cents per pound. Just a year and a half ago the average price was 17 cents per pound. It has been estimated that additional SO₂ control equipment would add between 1.7 and 5 cents per pound of refined lead to the proposed operating costs for this facility.

As has been shown in the preceding economic analysis, the economic burden of additional SO₂ removal controls would create distinct economic disadvantages for this recycling facility to compete on the open market. Reasonable cost effectiveness (cost/ton of pollutant removed) for non-boiler sources (Metals Industry) for non-hazardous situations has been estimated at \$293/ton ("Cost for Control of SO₂ Emissions," *CEP* June 1982 pg. 52). The

scrubbing systems discussed earlier range from \$414/ton to \$1,193/ton. Desulfurization was estimated at \$240/ton.

This BACT analysis showed dry and wet scrubbing systems are cost prohibitive and raise additional solid waste disposal problems. With the deletion of the HCl standard from the MACT standard for this industry a scrubbing system is not needed, further making scrubbing technologies undesirable. Desulfurization of the raw feed material was, therefore, determined to be BACT based on its economic, energy, and environmental considerations. Further, with the addition of the proposed afterburner discussed in section 2.4.3, the blast furnace will be able to operate at lower temperatures. By operating the furnace at lower temperatures sulfur dioxide formation will be decreased, thereby further decreasing SO₂ emissions.

Gulf Coast is the only lead-acid battery recycler remaining in the State of Florida. If Gulf Coast is required to install cost-prohibitive control technology, it will be placed in an extremely tight economic situation that could easily result in the facility becoming uneconomical to operate if an uncontrollable event, such as a slight drop in lead prices, occurs. If this should happen, the nearest battery recycling facility would be in Columbus, Georgia—approximately 425 miles away. The estimated 1.1 million batteries that Gulf Coast recycles annually would therefore have to be shipped by truck to the Columbus facility. This would inherently increase the cost of recycling which would hinder recycling efforts. There is no environmentally acceptable alternative to recycling spent lead-acid batteries. Resource Conservation and Recovery Act (RCRA) land-ban restrictions prohibit their disposal in hazardous waste landfills. As recycling becomes economically prohibitive, the potential for the public discarding batteries along roadways, in vacant lots, etc. increases dramatically.

2.2 LEAD

The current blast furnace permit limits lead emissions to 2.09 lbs/hr and 8.15 tons/yr. This permitted level was established years ago by assuming the lead levels to be a certain percentage of total particulates. This facility employs baghouses for particulate control including control of the blast furnace exhaust. These baghouses typically operate in excess of 99.5 percent control efficiency. Since lead is a particulate these baghouses are also very efficient in controlling lead. A source test performed on October 24, 1991 showed lead levels to be 0.006 lbs/hr (see **Appendix D**). Assuming that rate for a full year of 8,760 operational hours would give 0.0263 tons/yr, well below the 0.6 tons/yr significance level for lead. Therefore, lead levels from the blast furnace have actually decreased as a result of the modification.

Gulf Coast is hereby requesting a federally-enforceable, facility-wide permit limit for lead emissions of 0.59 tons/yr, which correlates to 0.134 lbs/hr for 8,760 hrs/yr. As mentioned above, Gulf Coast utilizes baghouses for particulate (and lead) control throughout the facility. A roof-mounted sprinkler system is also used for ambient dust suppression which minimizes fugitive emissions of particulates (and lead). Since the 0.59 tons/yr requested limit is below the significance level for lead, PSD/BACT is not applicable for this pollutant.

2.3 TOTAL PARTICULATES

must compare new allowable with 2 yr. actual

Current permitted levels are 3.20 lbs/hr and 12.48 tons/yr, which are based on 7,800 hrs/yr. With the requested 8,760 hrs/yr, the annual emission rate correlates to 14.02 tons/yr. This level does not exceed the 15 tons/yr significance level for particulates. Therefore, PSD/BACT is not applicable for this pollutant. In addition, Gulf Coast is located within an Air Quality Maintenance Area for particulate matter, subjecting them to F.A.C. Rule 17-2.650 (2), Reasonably Available Control Technology (RACT). The 14.02 tons/yr emission level requested above also keeps Gulf Coast in compliance with Specific Condition Number Two in the permit, and Exemption Number One of the RACT regulations which exempts facilities from the RACT requirements if facility-wide emissions are less than 5.0 lbs/hr and 15 tons/yr.

The NSPS pertaining to this industry is 40 CFR Subpart L §60.120. This standard limits particulate matter emissions from the blast furnace to 0.022 gr/dscf and 20% opacity. The flow rate of the blast furnace baghouse is 24,350 acfm, correlating to 20,250 dscfm. Assuming the allowable grain loading this results in an allowable emission rate of 3.82 lbs/hr:

$$\frac{20,250 \text{ dscfm} \times 0.022 \frac{\text{gr}}{\text{dscf}}}{7,000 \frac{\text{gr}}{\text{lb}}} \times 60 \frac{\text{min}}{\text{hr}} = 3.82 \frac{\text{lbs}}{\text{hr}}$$

The blast furnace is currently permitted for a maximum of 3.20 lbs/hr, below the NSPS limit. Because of this, it would be expected that the furnace is also in compliance with the opacity limit.

2.4 CARBON MONOXIDE

A source test performed on October 21 and November 4, 1991 showed CO emissions

from the new blast furnace to be 683.32 lbs/hr (see Appendix E). With the requested hours of operation of 8,760 hrs/yr, the annual rate correlates to a maximum 2,993 tons/yr, compared to the old furnace emission rate of 1,774 tons/yr. This is an increase of 1,219 tons/yr, greater than the 100 tons/yr significance level and making the furnace applicable to PSD/BACT for this pollutant.

There are several technologies available to control carbon monoxide emissions. Most of them fall into one of two categories: *incineration* or *catalytic conversion*. Both categories convert CO to carbon dioxide and water. Incineration techniques employing the combustible properties of CO burn it while catalytic conversion utilizes a catalyst instead of combustion. One catalytic conversion technology and two incineration technologies are reviewed in the following section.

2.4.1 Catalytic Oxidation

This technology utilizes a catalyst bed for the conversion of CO to carbon dioxide and water instead of a combustion device. Advantages to this system are lower fuel costs and no additional emissions from the combustion of natural gas. Disadvantages are high initial cost, cost of new or regenerating the catalyst bed, catalyst disposal problems, and fouling of the catalyst. Because of the high content of impurities in the gas stream from the furnace, e.g., SO₂, lead, particulates, and trace amounts of other metals, fouling of the catalyst would be a significant problem. It is not believed this technology is being used anywhere in this industry for controlling carbon monoxide emissions. It is therefore determined for this analysis that this technology could not be considered BACT.

2.4.2 CO Waste-Heat Boiler

Carbon Monoxide boilers are widely used in the petroleum refining industry as a means of controlling the CO emissions from the Fluid Catalytic Cracking Unit (FCCU). Combustible CO and auxiliary fuel is introduced into the firebox of the boiler. The CO is then converted into carbon dioxide and water. As this control technology may be appropriate for a refinery with large steam needs, it is not appropriate for Gulf Coast. Also, as mentioned previously, Gulf Coast has a wastewater discharge capacity issue. CO boilers also require a very "clean" fuel source, meaning the auxiliary fuel (usually natural gas) and FCCU waste gases must be combined with a high concentration of CO and other combustibles. CO boilers do not work well if large amounts of particulates or non-combustible gases are present. Any inorganic dusts and

fumes deposit on heat transfer surfaces causing excess maintenance costs and decreased efficiencies.

2.4.3 Afterburner/Incineration

A search of EPA's BACT/LAER Clearinghouse listed the following BACT determinations for carbon monoxide emissions from cupola and blast furnaces:

Thermal incineration - 99.5% efficiency	Partek Insulations, Inc.	BLIS ID AL-0063
Afterburner - 94% efficiency	U.S. Gypsum	BLIS ID IN-0004
3 stack afterburners - 94% efficiency	Lufkin Industries, Inc.	BLIS ID TX-0023
Incineration - 98.7% efficiency	Vermont Castings	BLIS ID VT-0001
Incineration - 1300°F & 0.3 sec	Waupaca Foundry #2	BLIS ID WI-0012

The *Best Available Control Technology Guidelines* document published by the South Coast Air Quality Management District (SCAQMD) in the Los Angeles Air Basin address CO emissions from lead melting furnaces (cupola or blast furnace) associated with secondary lead smelting. The BACT determination for CO from this source type is an afterburner with ≥ 0.3 second retention time at $\geq 1400^{\circ}\text{F}$ (see **Appendix F**). Also, see **Appendix P** for an afterburner destruction efficiency curve.

2.4.4 Carbon Monoxide Conclusions

Gulf Coast is hereby proposing to install an afterburner on the new furnace as BACT in addition to following good combustion practices to decrease the emissions increase to below the significance level. Assuming a minimum 90 percent reduction in emissions with the added CO emissions from the afterburner, this would result in annual emissions of approximately 299 tons/yr (68.3 lbs/hr for 8,760 hrs/yr). A screening model using this emission rate resulted in an 8-hour high, second-high impact of $27.2 \mu\text{g}/\text{m}^3$, well below the significance level of $575 \mu\text{g}/\text{m}^3$ (see section 4.1.4). This exempts CO from a refined air quality analysis.

All other sources of CO from the facility, while minor compared to the new furnace, will continue to incorporate operating parameters in an effort to minimize CO formation. An afterburner system with a minimum 1400°F temperature and 0.5-2.0 second retention time to reduce CO emissions at least 90 percent has been identified. Gulf Coast is currently in the process of accepting bids on afterburner systems. A separate application will be submitted at

such time as the specific system has been selected. Estimated capital cost is \$350,000-500,000.

2.5 NITROGEN OXIDES

The October through November 1991 source tests showed NO_x emissions to be 1.98 lbs/hr (see Appendix E). With the requested hours of operation of 8,760 hrs/yr, the annual rate correlates to a maximum 8.67 tons/yr, compared to the old furnace emission rate of 5.14 tons/yr. This is an increase of 3.53 tons/yr, well below the 40 tons/yr significance level. Even with the additional emissions from the proposed afterburner (20.91 tons/yr) NO_x emissions will remain below the significance level. Therefore, PSD/BACT is not applicable for this pollutant.

2.6 VOLATILE ORGANIC COMPOUNDS

The October through November 1991 source tests determined VOC emissions to be 33.10 lbs/hr (see Appendix E). With the requested hours of operation of 8,760 hrs/yr, the annual rate correlates to a maximum 145 tons/yr, compared to the old furnace emission rate of 86 tons/yr. This is an increase of 59 tons/yr, greater than the 40 tons/yr significance level outlined in the PSD regulations.

VOC emissions have not been addressed in detail specific to this industry. Neither the EPA BACT/LAER Clearinghouse nor the SCAQMD BACT Guidelines address VOC or reactive organic gases (ROG) from this source type. In addition, the applicable NSPS do not set limits for VOCs. Control technology in other industries varies widely from incinerators and flares to carbon adsorption and condensation. Due to the type of organics present, the lack of in-house reuse opportunities for collected organics, and lack of storage capacity, recovery techniques are not desirable at Gulf Coast. Of the various destruction technologies being used, flares and other open-flame combustion systems are not desirable in urban settings.

THCS ARE IN NSPS AS SURROGATES FOR ORG. MATS.

Afterburner destruction efficiencies for VOCs are typically in the 90-99 percent range. Therefore, assuming a 95 percent efficiency, VOC emissions with the proposed afterburner presented earlier (including VOC emissions from the afterburner) are estimated to be 7.67 tons/yr. This is a 90+ percent reduction from the 86 tons/yr from the old furnace. Since the Tampa-St. Petersburg area is classified as non-attainment for ozone, of which VOCs are considered precursors, the non-attainment regulations apply instead of the PSD regulations. This 90 percent reduction, obtained by internal offsets, complies with the net decrease provisions in the non-attainment regulations.

This strategy won't work. For this review permit must consider present emissions > 40% LAER REQ'D and incin. design must be reviewed

VOCs are not addressed in the current operating permit for the furnace. Gulf Coast is currently in the process of accepting bids on afterburner systems. A separate application will be submitted once a specific system has been selected.

They included limits reflecting afterburner, therefore this application must cover the incinerator

3.0 BASELINE DATA

This section discusses the existing air quality and the major sulfur dioxide-emitting sources in the subject area.

3.1 AMBIENT MONITORING DATA SUMMARY

Gulf Coast Recycling, Inc. was not required to conduct any pre-construction monitoring given the availability of data from nearby state-operated monitors. The area is designated as "unclassifiable" (cannot be classified as attainment or non-attainment) for SO₂. According to the Florida Department of Environmental Regulation, the ambient concentrations of sulfur dioxide near the Gulf Coast facility are 21 µg/m³, annual average; 93 µg/m³, 24-hour average (second-highest 24-hour monitored value in 1992); and 304 µg/m³, 3-hour average (second-highest 3-hour monitored value in 1992). These values were recorded at the Davis Island monitoring station, number 4360-0350-G02 located 8 kilometers (approximately 5 miles) WSW from Gulf Coast.

The responsible regulatory authority has discretion in requiring post construction monitoring data and, in general, will not require such monitoring. Factors such as complex terrain, fugitive emissions, and other uncertainties in source or emission characteristics result in significant uncertainties about the projected impact of the source. Gulf Coast is not located in complex terrain nor are fugitive emissions considered significant. Also, emissions of particulates that result in high concentrations near the property boundary are also not significant. Sulfur dioxide emissions, which are considered to result in more of a regional problem, have been modeled and have been shown to be below those emission rates that would result in exceedances of, or significantly contribute to exceedances of, any air quality standards or PSD increments. In addition, the DEP operates the Davis Island SO₂ monitor which is only approximately 5 miles WSW from Gulf Coast. This monitor has not shown any exceedances of the FAAQS.

3.2 SURROUNDING SOURCE EMISSION INVENTORY

The area surrounding Gulf Coast has a high density of large utility power generating stations with high sulfur dioxide emissions. The nine largest emitting units collectively emit over 100,000 lbs/hr compared to Gulf Coast's permitted 384.2 lbs/hr.

4.0

DISPERSION MODELING ANALYSIS

The PSD regulations require modeling analyses to predict the impacts on the ambient air quality standards and on the air quality increments for that area. The regulations also require an analysis of the predicted impacts on any Class I area that may be impacted. Thus, three separate analyses were done for SO₂ for this project:

- 1) The FAAQS analysis looked at the predicted impacts from Gulf Coast and surrounding sources on the human health-based Federal and Florida Ambient Air Quality Standards;
- 2) The Class I increment analysis predicted Gulf Coast's and other PSD sources' consumption of air quality increments at the Chassahowitzka National Wilderness Area;
- 3) The Class II increment analysis predicted Gulf Coast's and other PSD sources' consumption of air quality increments of the surrounding area, which is classified as a Class II area.

A screening analysis was performed for CO to determine if the predicted impacts exceeded the significance level. If it did, full FAAQS and Class I and II analyses would have to be performed.

Both increment analyses aimed at predicting the amount of remaining increments that would be consumed by Gulf Coast and other PSD sources and then comparing that prediction with the allowed consumption. This requirement provides for future growth by assuring that no one new source will deteriorate the air quality to the point that the ambient standards are on the verge of being violated, thereby not allowing any future source to locate in the area without causing a violation of the standards.

4.1 PROTOCOLS AND RESULTS

The modeling was conducted using EPA-approved methods as outlined in *Guideline on Air Quality Models* (Revised, EPA, 1986). The particular models used were the latest versions of the Industrial Source Complex Short Term model (ISCST3), used for the Class II and FAAQS SO₂ analyses, the Class I Level 1 analysis, and the CO screening analysis, and MESOPUFF II

long-range transport model, used for the Class I Level 2 SO₂ analysis.

A modeling protocol was submitted to DEP on August 17, 1993 for the SO₂ analyses (see **Appendix G**) and was approved as amended on September 24, 1993 (see **Appendix H**). The modeling protocol called for five years of meteorological data to be used for each analysis. The years 1982-86 were chosen, with the data being collected at the Tampa surface and upper air station number 12842 for all runs. The Class I analysis also utilized surface met data from Orlando and Gainesville. Each modeling run calculated SO₂ impacts for three averaging periods: 3-hour, 24-hour, and annual. For each analysis, the 3-hour and 24-hour standard (or increment) can be exceeded once per year at each receptor. Therefore, the maximum impact for each receptor for these averaging periods is the highest second-high value. The annual standard (or increment) cannot be exceeded. Therefore, the maximum impact for the annual averaging period for each receptor is the highest value.

The ISCST3 model was run in the regulatory default mode resulting in conservative impacts. Wet and dry deposition as well as SO₂ conversion were not used which further overestimates the impacts. All modeling assumed the blast furnace operates 8,760 hrs/yr. The Gulf Coast facility is located in a mixed-use area with both industrial facilities and residential areas located within a 50 km radius. The area is assumed to be rural with flat terrain for modeling purposes. The model did not calculate building downwash or wake effects due to the sufficient height of the furnace stack. This resulted in maximum downwind concentrations being calculated.

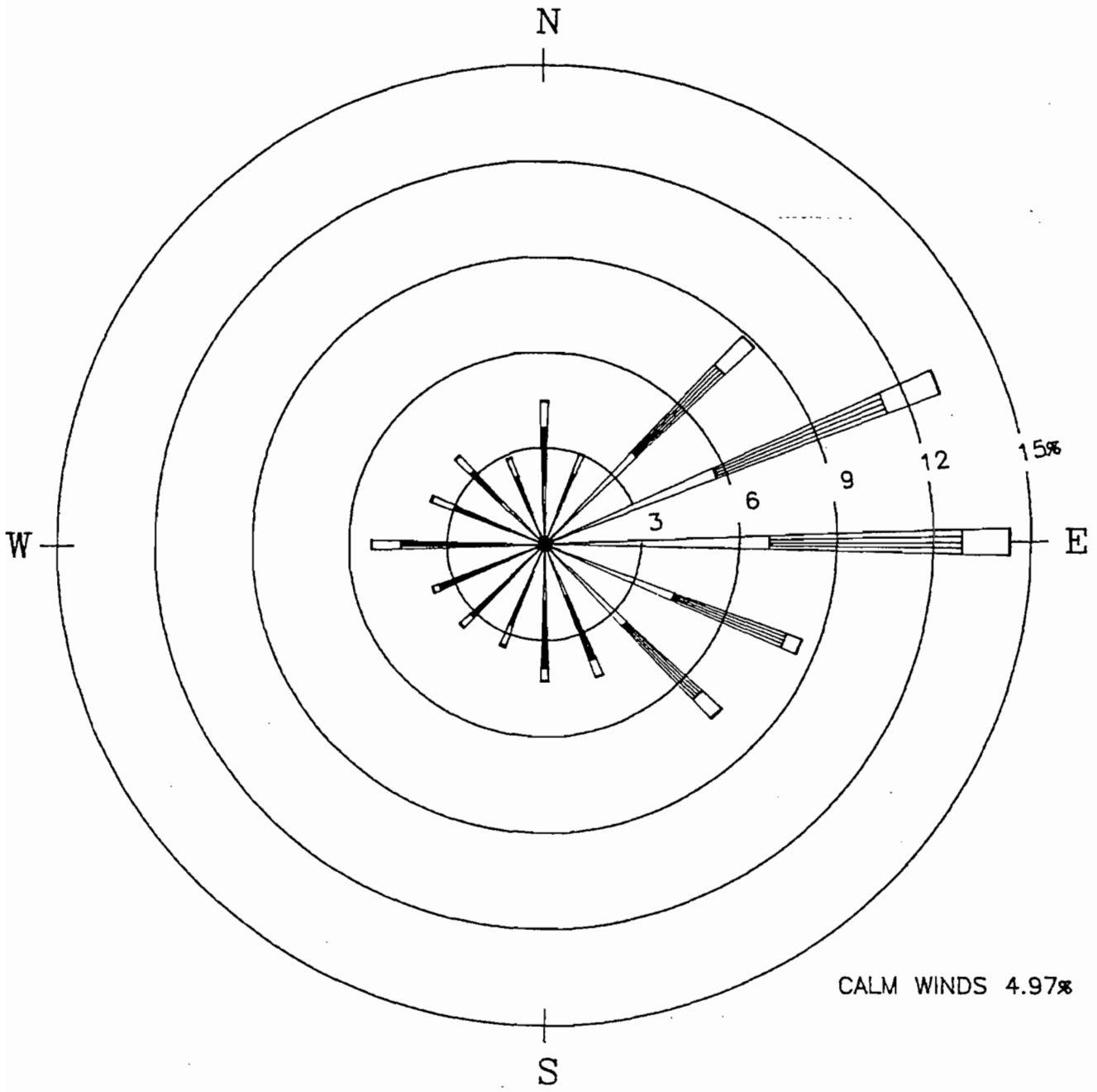
Three separate Cartesian receptor grids were used for the FAAQS and Class II analyses. The first grid placed 441 receptors at 100-meter intervals from Gulf Coast out to 1 kilometer. The second grid placed 441 receptors at 1-kilometer intervals from Gulf Coast out to 10 kilometers. The third grid placed 121 receptors at 10-kilometer intervals from Gulf Coast out to 50 kilometers, for a total of 1,003 receptors. The DEP identified 13 discrete receptors to be used for the Class I analysis. See **Appendix L** for these receptor locations.

4.1.1 Florida Ambient Air Quality Standards (FAAQS) Analysis

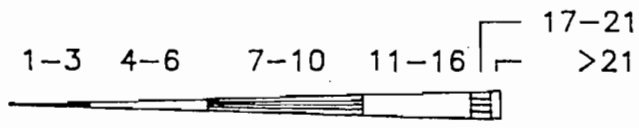
The FAAQS analysis compared the modeled impacts of emissions from Gulf Coast and sixty-eight surrounding sources with the Florida Ambient Air Quality Standards for SO₂. A listing of the 68 sources can be found in **Appendix I**. Florida's ambient standards were used for comparison instead of the federal standards because Florida's are more stringent for two of the three averaging periods (24-hour and annual). Background values measured at the Davis Island monitor, located approximately 8 kilometers (5 miles) WSW from Gulf Coast, were originally added to the modeled impacts, then compared to the ambient standards. These values were 304 $\mu\text{g}/\text{m}^3$, 3-hour average; 93 $\mu\text{g}/\text{m}^3$, 24-hour average; and 21 $\mu\text{g}/\text{m}^3$, annual average.

However, due to the location of the monitor in relation to all sources included in this analysis and the prevailing wind direction (see **Figure 4.1** for a Wind Rose for this area) it appeared as though many of the sources, including Gulf Coast, were already impacting the monitor. Tampa Electric Company's (TECO) Hooker's Point generating station, with a combined SO₂ emission rate for all units of over 3,087 lbs/hr, is located between 1.0 and 2.3 miles upwind (predominant wind direction) of the monitor, depending on the exact location of the monitor on Davis Island. This scenario resulted in those sources' emissions apparently being double-counted, once in the model and once in the background values. Since the background values were required to be added, it was thought the requirement to include all of the 68 surrounding sources identified by DEP into the model was overly burdensome. (A portion of the receptor grid placed six receptors within 1.2 kilometers of the Davis Island monitor. Due to the overly conservative requirements discussed above, the model was predicting values, as close as 400 meters from the Davis Island monitor, that were twice as high as those actually measured by the monitor.)

By letter dated March 7, 1994 (see **Appendix J**) DEP recognized this problem and reconsidered the background values originally chosen. DEP identified another monitor less likely to be impacted by sources included in the modeling, the TECO Big Bend Road monitor, number 1800-021-G02. The highest recorded annual value in the last three years at this monitor is 6 $\mu\text{g}/\text{m}^3$. The EPD stated this value could be used for all three averaging periods. The ambient impacts with the revised background values added are shown in **Table 4.1**.



CALM WINDS 4.97%



WIND SPEED CLASSES
(KNOTS)

WINDROSE
STATION NO. 12842
TAMPA, FL
PERIOD: 1982

NOTES:
DIAGRAM OF THE FREQUENCY OF OCCURRENCE FOR EACH WIND DIRECTION. WIND DIRECTION IS THE DIRECTION FROM WHICH THE WIND IS BLOWING. EXAMPLE - WIND IS BLOWING FROM THE NORTH 4.5 PERCENT OF THE TIME.

FIGURE 4.1

Table 4.1
FAAQS ANALYSIS RESULTS ³

values are in $\mu\text{g}/\text{m}^3$

AVG. PERIOD	FED. STND.	FLA. STND.	1982	1983	1984	1985	1986
3-hour ¹	1300	1300	1277	1071	1018	1269	1404
24-hour ¹	365	260	410	287	278	277	299
annual ²	80	60	61	56	61	65	68

¹ Highest second-high modeled impacts

² Highest first-high modeled impacts

³ Results include background value of $6 \mu\text{g}/\text{m}^3$ for all averaging periods. Value recorded at the TECO Big Bend Road monitoring station, no. 1800-021-G02.

The model was then re-run with two source groups, one with Gulf Coast's emissions only and one with the other 68 sources' emissions, for each year and averaging period that there was a predicted violation of the FAAQS. It was found that, even with Gulf Coast's emissions excluded, the model was showing exceedances of the standards. The model also showed that the maximum impacts with Gulf Coast's emissions excluded were no more than $1 \mu\text{g}/\text{m}^3$ lower than with Gulf Coast's emissions included. This tended to show that Gulf Coast was not contributing to the modeled FAAQS violations.

To prove that Gulf Coast was not contributing to the FAAQS violations, a further analysis was performed. A determination was made by DEP's modeling section that each FAAQS exceedance could be disregarded if the model showed Gulf Coast did not "significantly" contribute to the exceedance. An exceedance is a violation of the FAAQS for one averaging period (one year for the annual averaging period, one day for the 24-hour averaging period, and one 3-hour period for the 3-hour averaging period at any one receptor) for any one of the 1,003 receptors. The SO_2 significance levels are $25 \mu\text{g}/\text{m}^3$ for the 3-hour averaging period, $5 \mu\text{g}/\text{m}^3$ for the 24-hour averaging period, and $1 \mu\text{g}/\text{m}^3$ for the annual averaging period.

The "Maxi-file" output option in ISCST3 was used to create files listing all values that exceeded the respective FAAQS (eg. 82-24.ovr; 1982 met data, 24-hour averaging period), for

first PSD source was permitted in the respective area for the respective pollutant (December 27, 1977).

Class I Level 1 modeling using ISCST3 showed slight exceedances of the Class I increments for the 3-hour and 24-hour averaging periods at the previous emission rate of 374 lbs/hr. Since Gulf Coast is located 75 kilometers from the Wildlife Area, exceeding the accepted limit of 50 kilometers for the ISCST3 model, a long-range transport analysis was performed by Jim Clary and Associates using the updated MESOPUFF II model and the 374 lbs/hr emission rate. These Level 2 results are summarized in Table 4.2. The complete protocol and results summary can be found in Appendix L. Model outputs can be found in Volume III of the May 1994 application.

Table 4.2
CLASS I INCREMENT ANALYSIS RESULTS ¹
 values are in $\mu\text{g}/\text{m}^3$

AVERAGING PERIOD	ALLOWED INCREMENT	PREDICTED IMPACTS
3-hour	25	21.18
24-hour	5	7.32 ²
annual	2	-0.81

¹ Highest modeled impacts, 1986 met data

² Gulf Coast not significantly contributing

Since Gulf Coast is now requesting an SO₂ emission limit of 175 lbs/hr, the Class I Level 1 model was re-run with this lower limit. Overall impacts did not change due to the 137 surrounding sources' emission rates not changing. There were 321 total exceedances of the 3- and 24-hour increments out of a possible 213,525 (a 0.15% exceedance rate). The annual increment was not exceeded. An analysis was then performed to determine if Gulf Coast was significantly contributing to the exceedances by modeling Gulf Coast's emissions separately. Of the 321 total exceedances Gulf Coast was significantly contributing to 11 (a 3% rate).

The next step would be to re-run the MESOPUFF II model at 175 lbs/hr. However,

modeling all sources, and files listing the values that exceeded the significance levels, for modeling Gulf Coast only (eg. G82-24.ovr; Gulf Coast, 1982 met data, 24-hour averaging period). The FAAQS-exceeding Maxi-files were set at a threshold $6 \mu\text{g}/\text{m}^3$ below the respective FAAQS to account for the background value.

The FAAQS-exceeding files (all sources) for the 3-hour and 24-hour averaging periods were then compared to the respective significance level-exceeding Maxi-file (Gulf Coast only) to determine if, at the same receptor and during the same averaging period the AAQS were being exceeded, Gulf Coast was significantly contributing. In other words, they were compared to see if there were any receptors exceeding the FAAQS (all sources) that were also exceeding the significance levels (Gulf Coast only) on the same day during the same time period. If there were any duplications it was determined whether that exceedance was a first-high. If it was, it was disregarded (since the FAAQS can be exceeded once per year at each receptor, except for the annual averaging period). If there were any non-first-high duplications, that would mean that at that receptor on that day (and that time period for the 3-hour averaging period) Gulf Coast was significantly contributing to the FAAQS exceedance. This analysis showed no duplications, meaning Gulf Coast was not significantly contributing to any of the FAAQS violations predicted by the model.

Copies of the FAAQS-exceeding files (all sources) and significance level-exceeding files (Gulf Coast only), as well as all input and output files, can be found on diskette in **Appendix N**. Maxi-files can not be generated for the annual averaging period; therefore, the respective ".lst" files were used for that averaging period.

4.1.2 Class I Increment Analysis

The Class I increment analysis predicted the consumption by Gulf Coast and all other surrounding PSD sources of the air quality increments associated with the nearest Class I area. Gulf Coast is located approximately 75 kilometers (47 miles) SSE from the Chassahowitzka National Wilderness Area, and was thus required to perform dispersion modeling to determine the air quality impacts on the area. DEP identified 13 discrete receptors to be used as the receptor grid and 137 sources to be included in the modeling in addition to Gulf Coast. These additional sources, listed in **Appendix K**, were both *increment consuming*, meaning they were permitted after the baseline date, and *increment expanding*, meaning they had shut down since the baseline date and were thus entered into the model with the appropriate negative emission rate. The baseline date is that date after the implementation of the PSD regulations when the

Table 4.2 shows that the 3-hour and annual increments are not being exceeded at 374 lbs/hr. The table also shows that Gulf Coast is not significantly contributing to the 24-hour exceedance, also using the 374 lbs/hr. Predicted impacts using the requested 175 lbs/hr for Gulf Coast would obviously be no higher, and most likely lower, than those using 374 lbs/hr and depicted in **Table 4.2**. In review of the previous PSD application, concerns were raised regarding the previous MESOPUFF II analysis. The "deficiencies" are as follows:

- 1) Only 1 upper air station was used. It was suggested that two additional stations (West Palm Beach, FL and Waycross, GA) be incorporated to address the windflow from other sources.

As shown in Figure 2 of Appendix L of the previous application (copy attached) the vast majority of sources are located near the Tampa met station. It is felt that re-running the MESOPUFF II model using upper air stations in Georgia and in West Palm Beach is not going to influence the sources included in this project and, therefore, not necessary.

- 2) The MESOPUFF II analysis only used the SO₂ conversion and dry deposition options for Gulf Coast impacts, not for the other 137 sources.

This option was used as a conservative factor. The IWAQM allows for SO₂ conversion, dry deposition, and wet removal processes. Each of these processes reduce ambient SO₂ concentrations. Using the SO₂ conversion and dry deposition options for all sources will result in lower impacts. In addition, the use of wet deposition (which was not used for any sources) will significantly reduce impacts at long range. Therefore, it is felt that re-running the MESOPUFF II model using these options is not necessary.

4.1.3 Class II Increment Analysis

The Class II increment analysis predicted the consumption of the air quality increments for the project impact area, which is classified as a Class II area, by Gulf Coast and all other surrounding PSD sources. DEP identified 106 sources to be included in the modeling in addition to Gulf Coast. These additional sources, listed in **Appendix M**, were both increment consuming, meaning they were permitted after the baseline date, and increment expanding, meaning they had shut down since the baseline date and were thus entered into the model with

the appropriate negative emission rate. The baseline date is that date after the implementation of the PSD regulations when the first PSD source was permitted in the respective area for the respective pollutant (December 27, 1977). These results are shown in Table 4.3. Copies of the input and output files can be found on diskette in Appendix N.

Table 4.3
CLASS II INCREMENT ANALYSIS RESULTS

values are in $\mu\text{g}/\text{m}^3$

AVERAGING PERIOD	ALLOWED INCREMENT	1982	1983	1984	1985	1986
3-hour ¹	512	262	277	262	251	256
24-hour ¹	91	64	71	73	51	61
annual ²	20	0 ³	0	0	0	0

¹ Highest second-high modeled impacts

² Highest first-high modeled impacts

³ Zero values are actually negative, ISCST3 reports negative values as zero

4.1.4 CO Screening Analysis

A screening model was performed for CO to determine if Gulf Coast exceeded the significance level of $575 \mu\text{g}/\text{m}_3$, 8-hour averaging period, as outlined in 40 CFR 51.166 (i)(8)(i)(a). If this significance level was exceeded, a refined analysis would have to be done to include CO emissions from surrounding sources to determine compliance with the FAAQS and the Class I and II increments. The CO screening analysis used ISCST3 using the same default values and receptor grids as the SO₂ modeling. An emission rate of 69.5 lbs/hr was used, which is the emission rate with the afterburner installed. Even though the 8-hr standard may be exceeded once per year, the first-high value must be used in the screening analysis for conservative purposes. The results indicated a predicted maximum impact of $37.2 \mu\text{g}/\text{m}^3$, less than seven percent of the $575 \mu\text{g}/\text{m}^3$ significance level (see Table 4.4). No further analysis is therefore required. Copies of the input and output files can be found on diskette in Appendix N. Model outputs can be found in Volume II of the May 1994 application.

Table 4.4
CO SCREENING ANALYSIS RESULTS ¹

values are in $\mu\text{g}/\text{m}^3$

AVERAGING PERIOD	FED. & FLA. SIG. LEVEL	1986
8-hour	575	37

¹ Highest second-high modeled impact, 1986 met data

4.2 MODELING SUMMARY

The air dispersion modeling demonstrates that Gulf Coast will not cause or significantly contribute to a violation of the FAAQS or exceed the allowed increment consumption for all applicable areas and pollutants. The FAAQS analysis showed that although the model predicted a few violations of the Florida standards, Gulf Coast did not significantly contribute. The analysis also showed that this modeling protocol was very conservative, in that it predicted violations even with Gulf Coast's emissions excluded.

The Class I increment analysis showed that Gulf Coast, along with the applicable surrounding PSD sources, will not exceed the increment consumption allowed for the Chassahowitzka National Wilderness Area. The Class II increment analysis showed that Gulf Coast, along with the applicable surrounding PSD sources, will not exceed the increment consumption allowed for that area. The CO screening model showed that Gulf Coast will not exceed the significant level and therefore will not exceed the FAAQS or Class I or II increments.

The annual modeling results, which were based on 8,760 hrs/yr, supports Gulf Coast's request to increase the allowable operating hours from 7,800 to 8,760 hrs/yr.

5.0

EFFECTS ON AIR QUALITY RELATED VALUES (AQRV)

This section discusses the predicted impacts by Gulf Coast on air quality-related aspects other than ambient concentrations of sulfur dioxide. Among these aspects are impacts on soils, vegetation, wildlife, aquatic resources, and visibility. In addition, the economic impact of Gulf Coast is discussed.

5.1 INDUCED GROWTH IMPACT

It is anticipated that no induced growth impacts will occur as a result of this project. This modification was simply a replacement of a piece of equipment with no additional employees needed to operate it or any long-term construction-related employment. Therefore, no additional local or industrial support factors will be needed. Further, no additional air pollution will occur from any permanent residential, commercial, or industrial growth, since none is anticipated.

5.2 IMPACTS ON SOILS AND VEGETATION

The response of plants to SO₂ exposure is a complex process that involves not only the pollutant concentration and duration of exposure, but also the genetic composition of the plant and the environmental factors under which the exposure occurs. This process involves entrance of SO₂ into the plant through leaf openings called stomata, and contact within the leaf with wet cellular membranes and subsequent liquid phase reactions resulting in the formation of sulfite and sulfate compounds. The formation of these compounds can initiate changes within plants' metabolic systems that will produce physiological dysfunctions. If sufficient physiological modifications occur, plant homeostasis or equilibrium is disturbed and visible symptoms of injury may or may not be manifested. Plant repair mechanisms can result in a return to homeostasis and recovery.

In general, plants have an inherent, and apparently species-dependent, capacity to absorb, detoxify, and metabolically incorporate SO₂, and may absorb low concentrations of SO₂ over long time periods without damage. Thomas et al., for example, exposed alfalfa to SO₂ continuously, at 520 µg/m³ (0.20 ppm), for eight weeks without adverse effects. It is therefore

reasonable to expect that either no effects or beneficial effects may be associated with low-level SO₂ exposures.

Under certain conditions atmospheric SO₂ can have beneficial effects on agronomic vegetation. Sulfur is one of the elements required for plant growth and Coleman reported that crop deficiencies of sulfur have been occurring with increasing frequency throughout the world. Faller conducted a series of experiments to determine effects of varying atmospheric concentrations of SO₂ on sunflower, corn, and tobacco. Yields of leaves and stems increased by 80 percent in tobacco when exposed to atmospheric SO₂ concentrations of 1490 µg/m³ (0.57 ppm), sunflower and corn had their highest biomass at SO₂ concentrations of 1050 µg/m³ (0.40 ppm) and 520 µg/m³ (0.20 ppm), respectively. Nogales and Jones showed that cotton grown in specifically designed growth containers in the vicinity of certain coal-fired power plants accumulated significant amounts of atmospheric sulfur (as SO₂) and produced significantly more biomass than those grown at a location further from the industrial source of sulfur.

Limitations of space do not permit a listing here of all plants known to be sensitive to various doses of SO₂. Furthermore, in a listing of sensitive plants, the evidence collected should also indicate environmental, genetic, and cultural considerations that may in fact determine such sensitivities. In addition, general descriptions are difficult because plant responses to air pollutants vary at the genus, species, variety, and cultivar levels. **Table 5.1** is based on a 20-year study as conducted by Jones et al. This listing of sensitivity groupings is based on observations of 120 species growing in the vicinity of coal-fired power plants in the Southeast. From this table, it can be seen that the most sensitive vegetation showed visible signs of damage at exposure levels of 1310-2620 µg/m³ (1-hour period) and 790-1570 µg/m³ (3-hour period). The dispersion modeling results provided in this document revealed maximum ground level impacts of SO₂ in the Chassahowitzka Wilderness Area to be less than 10 µg/m³ (3-hour period) which is well below the critical levels for the most sensitive plants.

Extensive efforts have been made to identify and develop certain sensitive plant species as potential bioindicators of ambient air SO₂ effects. Perhaps the most extensively examined plants for this use are the eastern white pine. **Table 5.2** indicates the degree of injury of the white pine at various distances from the Sudbury Smelters over a ten year period. As the distance from the smelters increases, the annual exposure concentrations decrease and the degree of foliage injury also decreases. It was observed that at an annual concentration of 21 µg/m³ very little chronic injury resulted from the exposure. It should be noted here that the maximum allowable increase for SO₂ in a Class II area under the PSD regulations is 20 µg/m³. The

SENSITIVITY GROUPINGS OF VEGETATION BASED ON VISIBLE INJURY AT DIFFERENT SO₂ EXPOSURES^a

Sensitivity Grouping	SO ₂ concentration, $\mu\text{g}/\text{m}^3$ (ppm), and duration time, hr			Plants
	Peak ^b	1-hr	3-hr	
Sensitive:	2620-3930 $\mu\text{g}/\text{m}^3$ (1.0 - 1.5 ppm)	1310-2620 $\mu\text{g}/\text{m}^3$ (0.5 - 1.0 ppm)	790-1570 $\mu\text{g}/\text{m}^3$ (0.3 - 0.6 ppm)	Ragweeds Legumes Blackberry Southern pines Red and black oaks White ash Sumacs
Intermediate:	3930-5240 $\mu\text{g}/\text{m}^3$ (1.5 - 2.0 ppm)	2620-5240 $\mu\text{g}/\text{m}^3$ (1.0 - 2.0 ppm)	1570-2100 $\mu\text{g}/\text{m}^3$ (0.6 - 0.8 ppm)	Maples Locust Sweetgum Cherry Elms Tuliptree Many crop and garden species
Resistant:	>5240 $\mu\text{g}/\text{m}^3$ (> 2.0 ppm)	>5240 $\mu\text{g}/\text{m}^3$ (> 2.0 ppm)	>2100 $\mu\text{g}/\text{m}^3$ (> 0.8 ppm)	White oaks Potato Upland cotton Corn Dogwood Peach

^aBased on observations over a 20-year period of visible injury occurring on over 120 species growing in the vicinities of coal-fired power plants in the southeastern United States.

^bMaximum 5 minute concentration.

Source: After Jones et al., 1974.

TABLE 5.1

THE DEGREE OF INJURY OF EASTERN WHITE PINE OBSERVED AT VARIOUS DISTANCES FROM THE SUDBURY SHELTERS FOR 1953-63

Forest Sampling Station (Distance and Direction from Sudbury)	Trees with Current Year's Foliage Injured in August 1963 (%)	Trees with 1-Year-Old (1962) Foliage Injured ^a		Trees with 2-Year Old Foliage Lacking		Net Annual Average Gain or Loss in Total Volume, 1953-1963 (%)	Annual Average Mortality 1953-1963 (%)	Degree of SO ₂ Damage	Average SO ₂ Concentration ^b for Total Measurement Period 1954-1963 µg/m ³ (ppm)
		June 1963 (%)	August 1963 (%)	Injured in June 1963 (%)	In August 1963 (%)				
West Bay (19 miles NE)	2.0	30.0	77.9	96.0	20.6	-1.3	2.6	Acute and chronic injury	115 (0.045)
Portage Bay (25 miles NE)	1.1	21.5	55.6	77.0	15.2	-0.5	2.5	Mostly chronic and little acute injury	45 (0.017)
Grassy to Emerald Lake (40-43 miles NE)	0.4	2.5	16.7	37.5	9.1	+1.0	1.4	Very little chronic injury	21 (0.008)
Lake Malinenda (93 miles W)	0.6	0.3	2.1	10.1	3.9	+2.1	0.5	Control: no SO ₂ injury	3 (0.001) ^c (Sturgeon Falls)
Correlation Coefficient (r)	0.96	0.96	0.93 ^{AA}	0.90 ^{AA}	0.94 ^{AA}	0.90 ^{AA}	0.81		

^aLinzon (1971) (Pollutants other than SO₂ were not measured and the monitoring was done several miles from the pine stands.)

^bDreisinger (1965)

^cData for 5-month growing season-1971

^Ap < 0.05

^{AA}p < 0.10

Derived from Linzon, 1980.

3-22

TABLE 5.2

dispersion modeling results provided in this document show the annual increment impacts for both the Class I and Class II areas to be negative.

5.3 IMPACTS ON VISIBILITY

"Atmospheric visibility" is a term often used by airport weather observers to connote visual range, which refers to the farthest distance at which a large, black object can be seen against the horizon sky in the daytime. Visibility relates to atmospheric clarity and the perceived characteristics of viewed surroundings, including the contrast and the color of objects and sky. Pollution affects visibility in two primary ways: (1) as coherent plumes or haze layers visible because of their contrast with the background; and (2) as widespread, relatively homogeneous haze that reduces contrast of viewed targets and reduces visual range. The kind and degree of effects are determined largely by the distribution and characteristics of atmospheric particulate matter, which scatters and absorbs light.

For purposes of evaluating the potential effects that Gulf Coast's emissions may have on the visibility in the Chassahowitzka National Wilderness Area, EPA's *Workbook for Plume Visual Impact Screening and Analysis (Revised)*" EPA-454/R-92-023 was followed. This guidance document is designed to assist the user in the evaluation of plume visual impact as required by the PSD and visibility regulations of the EPA. This document provides guidance on the assessment of plume visual impacts, including the use of a plume visual impact screening model (VISCREEN), which was used to calculate the potential visual impacts of a plume of specified emissions for specific worst-case transport and dispersion conditions. If these screening calculations, using VISCREEN, demonstrate that during worst-cast meteorological conditions a plume is either imperceptible or is not likely to be objectionable, further analysis of plume visual impact would not be required as part of the air quality review of a source.

VISCREEN is a simple plume visibility model. The objective of the model is to calculate the contrast and the color difference of a plume and its viewing background. Because VISCREEN is to be used for screening calculations, it was designed to be conservative (i.e., to overpredict potential plume visual impacts). Therefore, VISCREEN calculates greater plume visual impacts, for the same input specifications, than more sophisticated models such as PLUVUE and PLUVUE II. The VISCREEN Level-1 screening analysis determines whether the plume from Gulf Coast has the potential to be perceptible to untrained observers under "reasonable worst-case" conditions. This conservatism was achieved by making the following worst-case assumptions:

- Worst-case meteorological conditions are assumed: atmospheric stability is extremely stable (F), wind speed is very low (1 meter per second), and wind direction is such that it would transport the plume directly perpendicular to the observer. It is assumed these meteorological conditions persist for 12 hours, after which some additional dispersion is assumed but the plume is still considered to remain intact;
- The line of sight is horizontal, so that it intersects the most plume material. Non horizontal lines of sight intersect less plume material because horizontal dispersion of plumes exceeds vertical dispersion, especially under stable conditions;
- Sun (scattering) angles are such that the forward scatter case ($\theta=10^\circ$) yields very bright plumes because the sun is placed nearly directly in front of the observer. This geometry would rarely occur in reality. The background scatter case ($\theta=140^\circ$) yields the darkest possible plumes. Thus, the screening calculations are likely to yield the brightest and the darkest plumes;
- No multiple scattering occurs. Light scattered into the line of sight from directions other than directly from the sun tend to slightly decrease the plume contrast for the worst-case sun angles assumed;
- For terrain viewing backgrounds, the terrain is black (the darkest possible) and is located as close to the observer and the plume as possible. This assumption yields the darkest possible background against which particulate plumes are likely to be most visible. In reality, terrain viewing backgrounds (if indeed terrain is behind the plume) would be less dark and would be located farther from the observer;
- The screening thresholds ($\Delta E=2$; contrast of 0.05) were selected at the upper bound of the perceptibility threshold, representing a reasonable estimate for casual observers in the field;
- Particulate mass median diameters are $0.3 \mu\text{m}$ for background fine particles, $6 \mu\text{m}$ for background coarse particles, $2 \mu\text{m}$ for plume particulate particles, $0.1 \mu\text{m}$ for plume soot particles, and $0.5 \mu\text{m}$ for plume primary sulfate particles; and
- All emissions of particulate matter from the facility are dispersed in one plume.

This conservatism was increased in this particular analysis with the following:

- Allowable emissions of particulates and nitrogen oxides were included even though these emissions did not exceed the PSD thresholds; and
- 100% of the requested 175 lbs/hr of SO₂ were assumed to be emitted as SO₄ which has a much greater affect on visibility. This was done despite the following guidance from *Workbook For Plume Visual Impact Screening and Analysis (Revised)*: "SO₂ emissions are not required as input to VISCREEN. Moreover, the issue of secondary sulfate formation (SO₄) is not treated in VISCREEN because of the limited range of applicability of a steady state Gaussian dispersion model and because of the uncertainty of estimating the conversion of SO₂ to SO₄ in a coherent plume.

The results of this analysis, which can be found in **Tables 5.3-5**, summarize the screening calculations by comparing the criteria levels of the two screening parameters; delta E-color contrast, and Contrast-total plume contrast against the calculated results. The Level 1 results indicate that the screening criteria were not exceeded. This visibility analysis satisfies all EPA criteria for Class I areas and demonstrates that the Gulf Coast blast furnace does not adversely impact visibility in the Chassahowitzka National Wilderness Area.

Visual Effects Screening Analysis for
 Source: GULF COAST RECYC.
 Class I Area: CHASSAHOWITZKA NWA

*** Level-1 Screening ***
 Input Emissions for

Particulates	3.20	LB /HR
NOx (as NO2)	1.98	LB /HR
Primary NO2	.00	LB /HR
Soot	.00	LB /HR
Primary SO4	262.50	LB /HR

**** Default Particle Characteristics Assumed

Transport Scenario Specifications:

Background Ozone:	.04 ppm
Background Visual Range:	25.00 km
Source-Observer Distance:	76.00 km
Min. Source-Class I Distance:	76.00 km
Max. Source-Class I Distance:	95.60 km
Plume-Source-Observer Angle:	11.25 degrees
Stability:	6
Wind Speed:	1.00 m/s

R E S U L T S

Asterisks (*) indicate plume impacts that exceed screening criteria

Maximum Visual Impacts INSIDE Class I Area
 Screening Criteria ARE NOT Exceeded

Backgrnd	Theta	Azi	Distance	Alpha	Delta E		Contrast	
					Crit	Plume	Crit	Plume
SKY	10.	84.	76.0	84.	2.00	.414	.05	.006
SKY	140.	84.	76.0	84.	2.00	.180	.05	-.009
TERRAIN	10.	84.	76.0	84.	2.00	.294	.05	.003
TERRAIN	140.	84.	76.0	84.	2.00	.082	.05	.003

Maximum Visual Impacts OUTSIDE Class I Area
 Screening Criteria ARE NOT Exceeded

Backgrnd	Theta	Azi	Distance	Alpha	Delta E		Contrast	
					Crit	Plume	Crit	Plume
SKY	10.	75.	73.6	94.	2.00	.430	.05	.006
SKY	140.	75.	73.6	94.	2.00	.187	.05	-.010
TERRAIN	10.	60.	69.5	109.	2.00	.389	.05	.004
TERRAIN	140.	60.	69.5	109.	2.00	.109	.05	.004

LINE OF SIGHT	OUT/IN	PHI	ALPHA	X	RP	RO	PSI	CONTRAST THRESHLD	DELTA E THRESHLD	DELTA E PL/SKY FORW'D	DELTA E THRESHLD	DELTA E PL/SKY BACK	DELTA E THRESHLD	DELTA E PL/TER FORW'D	DELTA E THRESHLD	DELTA E PL/TER BACK
1	0	5.0	163.8	23.7	53.0	63.0	0.30	0.05	2.00	0.00	2.00	0.00	2.00	0.01	2.00	0.00
2	0	10.0	158.8	36.4	40.9	54.1	0.44	0.05	2.00	0.02	2.00	0.01	2.00	0.03	2.00	0.01
3	0	15.0	153.8	44.5	33.5	47.8	0.57	0.05	2.00	0.06	2.00	0.04	2.00	0.07	2.00	0.02
4	0	20.0	148.8	50.1	28.6	43.0	0.69	0.05	2.00	0.11	2.00	0.06	2.00	0.11	2.00	0.03
5	0	25.0	143.8	54.3	25.1	39.4	0.80	0.05	2.00	0.16	2.00	0.09	2.00	0.16	2.00	0.05
6	0	30.0	138.8	57.6	22.5	36.7	0.90	0.05	2.00	0.20	2.00	0.11	2.00	0.21	2.00	0.06
7	0	35.0	133.8	60.3	20.5	34.5	1.00	0.05	2.00	0.24	2.00	0.13	2.00	0.26	2.00	0.07
8	0	40.0	128.8	62.6	19.0	32.8	1.09	0.05	2.00	0.28	2.00	0.15	2.00	0.30	2.00	0.09
9	0	45.0	123.8	64.6	17.8	31.5	1.17	0.05	2.00	0.32	2.00	0.16	2.00	0.34	2.00	0.10
10	0	50.0	118.8	66.4	16.9	30.5	1.24	0.05	2.00	0.36	2.00	0.17	2.00	0.37	2.00	0.10
11	0	55.0	113.8	68.0	16.2	29.8	1.30	0.05	2.00	0.38	2.00	0.18	2.00	0.38	2.00	0.11
12	0	60.0	108.8	69.5	15.7	29.3	1.35	0.05	2.00	0.40	2.00	0.18	2.00	0.39	2.00	0.11
13	0	65.0	103.8	70.9	15.3	29.1	1.39	0.05	2.00	0.42	2.00	0.19	2.00	0.39	2.00	0.11
14	0	70.0	98.8	72.3	15.0	29.1	1.42	0.05	2.00	0.43	2.00	0.19	2.00	0.37	2.00	0.10
15	0	75.0	93.8	73.6	14.9	29.3	1.44	0.05	2.00	0.43	2.00	0.19	2.00	0.35	2.00	0.10
16	0	80.0	88.8	74.9	14.8	29.8	1.45	0.05	2.00	0.42	2.00	0.18	2.00	0.32	2.00	0.09
17	1	85.0	83.8	76.2	14.9	30.5	1.45	0.05	2.00	0.41	2.00	0.18	2.00	0.29	2.00	0.08
18	1	90.0	78.8	77.5	15.1	31.5	1.43	0.05	2.00	0.39	2.00	0.17	2.00	0.25	2.00	0.07
19	1	95.0	73.8	78.9	15.4	32.8	1.41	0.05	2.00	0.37	2.00	0.17	2.00	0.21	2.00	0.06
20	1	100.0	68.8	80.3	15.9	34.5	1.37	0.05	2.00	0.34	2.00	0.16	2.00	0.16	2.00	0.05
21	1	105.0	63.8	81.9	16.5	36.7	1.32	0.05	2.00	0.31	2.00	0.15	2.00	0.12	2.00	0.03
22	1	110.0	58.8	83.5	17.3	39.4	1.27	0.05	2.00	0.27	2.00	0.13	2.00	0.08	2.00	0.02
23	1	115.0	53.8	85.4	18.4	43.0	1.20	0.05	2.00	0.23	2.00	0.12	2.00	0.05	2.00	0.01
24	1	120.0	48.8	87.5	19.7	47.8	1.13	0.05	2.00	0.19	2.00	0.10	2.00	0.03	2.00	0.01
25	1	125.0	43.8	90.0	21.4	54.1	1.04	0.05	2.00	0.15	2.00	0.08	2.00	0.01	2.00	0.00
26	1	130.0	38.8	93.0	23.7	63.0	0.95	0.05	2.00	0.11	2.00	0.07	2.00	0.00	2.00	0.00
27	0	135.0	33.8	96.7	26.7	76.0	0.85	0.05	2.00	0.08	2.00	0.05	2.00	0.00	2.00	0.00
28	0	140.0	28.8	101.6	30.8	96.7	0.74	0.05	2.00	0.05	2.00	0.03	2.00	0.00	2.00	0.00
29	0	145.0	23.8	108.2	36.8	134.4	0.63	0.05	2.00	0.02	2.00	0.01	2.00	0.00	2.00	0.00
30	0	150.0	18.8	118.2	46.1	222.8	0.51	0.05	2.00	0.01	2.00	0.00	2.00	0.00	2.00	0.00
31	0	155.0	13.8	135.1	62.4	666.8	0.38	0.05	2.00	0.00	2.00	0.00	2.00	0.00	2.00	0.00
32	0	0.1	168.6	1.0	75.0	75.5	0.05	0.09	5.67	0.00	2.00	0.00	5.67	0.00	2.00	0.00
33	1	84.4	84.4	76.0	14.9	30.4	1.45	0.05	2.00	0.41	2.00	0.18	2.00	0.29	2.00	0.08
34	1	133.6	35.1	95.6	25.8	71.8	0.88	0.05	2.00	0.09	2.00	0.05	2.00	0.00	2.00	0.00

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C O N T R A S T R E S U L T S

C O N T R A S T R E S U L T S

LINE OF SIGHT	OUT/ IN	PHI	CONTRAST THRESHLD	GREEN	GREEN	GREEN	GREEN	BLUE	BLUE	BLUE	BLUE	RED	RED	RED	RED	BLUE-RED	BLUE-RED		
				CONTRAST	DELTA C	CONTRAST	DELTA C	CONTRAST	DELTA C	CONTRAST	DELTA C	CONTRAST	DELTA C	CONTRAST	DELTA C	CONTRAST	DELTA C	RATIO	RATIO
				PL/SKY	SKY/TER	PL/SKY	SKY/TER	PL/SKY	SKY/TER	PL/SKY	SKY/TER	PL/SKY	SKY/TER	PL/SKY	SKY/TER	PL/SKY	SKY/TER	PL/SKY	PL/SKY
				FORW'D	FORW'D	BACK	BACK	FORW'D	FORW'D	BACK	BACK	FORW'D	FORW'D	BACK	BACK	FORW'D	BACK	FORW'D	BACK
1	0	5.0	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	1.000		
2	0	10.0	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	-0.001	0.001	1.000	1.001		
3	0	15.0	0.050	0.001	0.000	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.002	-0.002	0.002	1.000	1.002		
4	0	20.0	0.050	0.002	0.001	-0.002	0.001	0.001	0.000	-0.001	0.000	0.001	0.003	-0.004	0.003	1.000	1.003		
5	0	25.0	0.050	0.002	0.001	-0.004	0.001	0.002	0.000	-0.001	0.000	0.001	0.004	-0.005	0.004	1.001	1.004		
6	0	30.0	0.050	0.003	0.002	-0.005	0.002	0.003	0.000	-0.002	0.000	0.001	0.005	-0.006	0.005	1.002	1.004		
7	0	35.0	0.050	0.004	0.002	-0.006	0.002	0.004	0.000	-0.003	0.000	0.001	0.005	-0.007	0.005	1.003	1.004		
8	0	40.0	0.050	0.004	0.003	-0.007	0.003	0.004	0.001	-0.004	0.001	0.001	0.006	-0.008	0.006	1.003	1.004		
9	0	45.0	0.050	0.005	0.003	-0.008	0.003	0.005	0.001	-0.005	0.001	0.001	0.007	-0.008	0.007	1.004	1.003		
10	0	50.0	0.050	0.005	0.003	-0.008	0.003	0.006	0.001	-0.005	0.001	0.001	0.007	-0.009	0.007	1.005	1.004		
11	0	55.0	0.050	0.006	0.004	-0.009	0.004	0.007	0.001	-0.006	0.001	0.001	0.007	-0.009	0.007	1.006	1.003		
12	0	60.0	0.050	0.006	0.004	-0.009	0.004	0.007	0.001	-0.006	0.001	0.001	0.007	-0.009	0.007	1.006	1.003		
13	0	65.0	0.050	0.006	0.004	-0.009	0.004	0.007	0.001	-0.007	0.001	0.001	0.007	-0.009	0.007	1.006	1.002		
14	0	70.0	0.050	0.006	0.004	-0.010	0.003	0.008	0.001	-0.007	0.001	0.001	0.007	-0.009	0.007	1.007	1.002		
15	0	75.0	0.050	0.006	0.003	-0.010	0.003	0.008	0.001	-0.007	0.001	0.001	0.007	-0.009	0.007	1.007	1.002		
16	0	80.0	0.050	0.006	0.003	-0.009	0.003	0.008	0.001	-0.007	0.001	0.001	0.006	-0.009	0.006	1.007	1.002		
17	1	85.0	0.050	0.006	0.003	-0.009	0.003	0.007	0.001	-0.007	0.001	0.001	0.006	-0.009	0.005	1.006	1.002		
18	1	90.0	0.050	0.006	0.002	-0.009	0.002	0.007	0.001	-0.006	0.001	0.001	0.005	-0.008	0.005	1.006	1.002		
19	1	95.0	0.050	0.005	0.002	-0.008	0.002	0.007	0.000	-0.006	0.000	0.001	0.004	-0.008	0.004	1.006	1.002		
20	1	100.0	0.050	0.005	0.001	-0.008	0.001	0.006	0.000	-0.005	0.000	0.001	0.003	-0.008	0.003	1.005	1.003		
21	1	105.0	0.050	0.005	0.001	-0.007	0.001	0.005	0.000	-0.005	0.000	0.001	0.003	-0.007	0.003	1.004	1.002		
22	1	110.0	0.050	0.004	0.001	-0.006	0.001	0.005	0.000	-0.004	0.000	0.001	0.002	-0.007	0.002	1.004	1.003		
23	1	115.0	0.050	0.004	0.000	-0.006	0.000	0.004	0.000	-0.003	0.000	0.001	0.001	-0.006	0.001	1.003	1.003		
24	1	120.0	0.050	0.003	0.000	-0.005	0.000	0.003	0.000	-0.003	0.000	0.001	0.001	-0.005	0.001	1.002	1.002		
25	1	125.0	0.050	0.002	0.000	-0.004	0.000	0.002	0.000	-0.002	0.000	0.001	0.000	-0.004	0.000	1.001	1.002		
26	1	130.0	0.050	0.002	0.000	-0.003	0.000	0.001	0.000	-0.001	0.000	0.001	0.000	-0.003	0.000	1.000	1.002		
27	0	135.0	0.050	0.001	0.000	-0.002	0.000	0.001	0.000	-0.001	0.000	0.000	0.000	-0.002	0.000	1.001	1.001		
28	0	140.0	0.050	0.001	0.000	-0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.002	0.000	1.000	1.002		
29	0	145.0	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.001	0.000	1.000	1.001		
30	0	150.0	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	1.000		
31	0	155.0	0.050	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	1.000		
32	0	0.1	0.093	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.000	1.000		
33	1	84.4	0.050	0.006	0.003	-0.009	0.003	0.007	0.001	-0.007	0.001	0.001	0.006	-0.009	0.006	1.006	1.002		
34	1	133.6	0.050	0.001	0.000	-0.002	0.000	0.001	0.000	-0.001	0.000	0.000	0.000	-0.003	0.000	1.001	1.002		

REFERENCES

Thomas et al., Coleman, Faller, Nogales and Jones, Jones et al. "Air Quality Criteria for Particulate Matter and Sulfur Oxides, Volume III." United States Environmental Protection Agency, EPA-600/8 - 82/029 c, December 1982

6.0 APPLICATION FORMS

The next 12 pages consist of the completed DEP application forms.

7.0 SUMMARY AND CONCLUSIONS

The information contained in this document supports the issuance of the Prevention of Significant Deterioration construction and operating permit for Gulf Coast Recycling, Inc. located in Tampa, Florida. Air dispersion modeling, along with current operating permits and ambient monitoring data, have shown that Gulf Coast currently is and will continue to be in compliance with all applicable local, state, and federal air quality regulations. The BACT analysis showed that desulfurization of the feed material is the most cost-effective and environmentally-friendly means of reducing SO₂ emissions. The modeling analysis showed that the emission reductions achieved with the desulfurization system are sufficient to ensure that SO₂ emissions from Gulf Coast are not exceeding any ambient standards or PSD increments, nor are they degrading visibility in the nearest Class I area.

Gulf Coast has also committed to installing an afterburner to control VOC and CO emissions. As mentioned earlier, Gulf Coast is the only lead-acid battery recycler in the state of Florida. A shutdown of this facility will require the transport of approximately 1.1 million batteries per year 425 miles to the nearest recycling facility in Columbus, Georgia, thus increasing mobile-source air emissions to the region.

APPENDIX A
CURRENT OPERATING PERMIT
NO. AO29-173310

Best Available Copy



Florida Department of Environmental Regulation

Southwest District • 4520 Oak Fair Boulevard • Tampa, Florida 33610-7347 • 813-623-5561

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary
Dr. Richard Garrity, Deputy Assistant Secretary

PERMITTEE:

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

PERMIT/CERTIFICATION

Permit No: A029-173310
County: Hillsborough
Amendment Date: 11/19/90
Expiration Date: 11/15/95
Project: Blast Furnace and
Agglomeration Furnace

This amended permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 & 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the department and made a part hereof and specifically described as follows:

For the operation of a secondary lead blast furnace and a flue dust agglomeration furnace. At the facility leadbearing scrap materials (LSM's), coke, lime rock, cast iron and slag are loaded into a skip-hoist and charged into the blast furnace (60 ton capacity). Lead in the liquid form collects at the base of the blast furnace. In this process lime rock is added to displace the lead in any lead silicate which might have been formed, while cast iron (iron oxide) binds with any sulfur to produce iron sulfide thus reducing sulfur dioxide emissions. The lead is tapped from the blast furnace and cast into buttons. Emissions generated by the charging (Point 06), the blast furnace exhaust (Point 01) and the tapping (Point 04) are controlled by three (3) sets of baghouses which vent separately. Flue dust collected by the baghouses is conveyed to an agglomeration furnace fired on natural gas. The blast furnace is subject to the New Source Performance Standards of 40 CFR 60, Subpart L, Standards of Performance for Secondary Lead Smelters and the Federal Implementation Plan contained in 40 CFR 52.535.

Location: 1901 North 66th Street, Tampa

UTM: 17-364.0 E 3093.6 N NEDS NO: 0057 Point ID: 01 - Furnace Exhaust
04 - Tapping
06 - Charging

Replaces Permit No.: A029-95366

DER Form 17-1.201(5) Page 1 of 5

PERMITTEE:
Gulf Coast Recycling,
Inc.

PERMIT/CERTIFICATION NO.: AO29-173310
PROJECT: Blast Furnace and Agglomeration
Furnace

SPECIFIC CONDITIONS:

1. A part of this permit is the attached 15 General Conditions.
2. Pursuant to Rule 17-2.650(2)(b)1., F.A.C., this facility qualifies for an exemption of the Reasonably Available Control Technology (RACT) requirements since, at the request of the permittee, the total allowable emissions of the facility shall not exceed 4.4 pounds per hour and 14.9 tons per year.
3. Pursuant to 40 CFR 60.122(a)(1), the permittee shall not discharge from the baghouses particulate emissions greater than 0.022 grains per dry standard cubic foot.
4. In order to insure compliance with Specific Condition No. 2, the maximum allowable particulate matter emissions and hours of operation of the sources authorized to operate under this permit shall be:

<u>Source</u>	<u>Emission Limitations</u>	<u>Hours of Operation</u>
Blast Furnace Charging	0.65 lbs./hr. (2.54 TPY)	7800
Blast Furnace	2.15 lbs./hr. (8.38 TPY)	7800
Blast Furnace Tapping	0.40 lbs./hr. (1.56 TPY)	7800

* Prior to initiating any actions to increase the capture efficiency of the system, the permittee shall request written authorization from the Environmental Protection Commission of Hillsborough County.

5. Pursuant to 40 CFR 52.535(c)(1)(i), the maximum allowable lead emissions from the sources authorized to operate under this permit shall be:

<u>Source</u>	<u>Emissions Limitations</u>
Blast Furnace Charging	0.22 lbs./hr. (0.86 TPY)
Blast Furnace	1.81 lbs./hr. (7.06 TPY)
Blast Furnace Tapping	0.06 lbs./hr. (0.23 TPY)

6. Pursuant to 40 CFR 52.535(c)(1)(ii), visible emissions from the closed charge doors on the blast furnace shall not exceed five (5) percent opacity during furnace operation.

7. Pursuant to 40 CFR 52.535(c)(1)(iii), visible emissions from the charge doors on the blast furnace shall not exceed ten (10) percent opacity during charging operations.

PERMITTEE:
Gulf Coast Recycling,
Inc.

PERMIT/CERTIFICATION NO.: AO29-173310
PROJECT: Blast Furnace and Agglomeration
Furnace

SPECIFIC CONDITIONS: (continued)

8. Pursuant to 40 CFR 52.535(c)(1)(iv), visible emissions from all other sources authorized to operate under this permit shall not exceed five (5) percent opacity.

9. 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) than the permittee shall immediately reapply for a new permit under the provisions of Section 17-2.500, F.A.C.

10. Test emissions from the blast furnace charging, blast furnace, and blast furnace tapping operations for the following pollutants at intervals of twelve (12) months from February 14, 1990 and submit 2 copies of test data to the Environmental Protection Commission of Hillsborough County within forty-five (45) days of such testing pursuant to Section 17-2.700, F.A.C.:

- | | |
|------------------|--------------------|
| (X) Particulates | (X) Sulfur Oxides* |
| (X) Opacity | (X) Lead |

* Applies only to the blast furnace emissions.

11. Compliance with the emission limitations of Specific Conditions Nos. 3, 4, 5, 6, 7 and 8 shall be determined using EPA Methods 1, 2, 3, 4, 6, 9 and 12 contained in 40 CFR 60, Appendix A and adopted by reference in Section 17-2.700, F.A.C. In the case of the Method 9, Section 2.5 shall be excluded, pursuant to 40 CFR 52.535(b)(5).; thus waiving the six minute averaging period and establishing an instantaneous standard. The annual sulfur oxide test will be conducted by the same method used in the December, 1983 test. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Section 17-2.700, F.A.C. and 40 CFR 60, Appendix A.

12. The visible emission test on the blast furnace shall be sixty (60) minutes in duration pursuant to Section 17-2.700, F.A.C., and shall be conducted concurrent with one of the Method 12 runs.

13. The visible emission tests on the blast furnace charging operation shall each be sixty (60) minutes in duration, pursuant to Rule 17-2.700(1)(d)1.b.i., F.A.C. Readings shall be taken on the :

- A) Charge doors on the blast furnace during charging (closest potential emission point).
- B) Closed charge doors on the blast furnace during furnace operation (closest potential emission point).
- C) Baghouse exhaust during blast furnace operation.

PERMITTEE:
Gulf Coast Recycling,
Inc.

PERMIT/CERTIFICATION NO.: AO29-173310
PROJECT: Blast Furnace and Agglomeration
Furnace

SPECIFIC CONDITIONS: (continued)

14. The visible emission test on the blast furnace tapping shall be sixty (60) minutes in duration pursuant to Rule 1702.700(1)(d)1.b.i., F.A.C. Readings shall be taken only during product tapping.

15. The maximum process input rate shall be 4.58 tons per hour of raw materials. Raw material charging rates on a daily basis shall be consistent with the following percentages based on the February, 1990 test.

<u>Raw Material</u>	<u>Percentage</u>
Lead Scrap and Re-Run Slag	88% - 4.03
Coke	7% - 0.32
Lime Rock	2.5% - 0.11
Cast Iron	2.5% - 0.11

16. Testing of emissions must be accomplished at approximately the maximum process weight rate of 4.58 tons per hour of raw materials. The actual charging rate and type of materials charged during the test shall be specified in each test result. Failure to include the actual process or production rate in the results may invalidate the test [Rule 17-4.070(3), F.A.C.].

17. Pursuant to 40 CFR 52.535(b)(2), non-process fugitive emissions (road dust, stockpiles, plant grounds, etc.) shall be minimized. Minimization efforts shall include such fugitive dust suppression activities as chemical stabilization, water spraying with appropriate runoff collection, resurfacing, sweeping, revegetation, and other EPA approved methods.

18. Pursuant to 40 CFR 52.535(b)(4), the permittee shall maintain continuous records of plant process and emission control operations as necessary to determine continuous compliance. Such records shall include reports of all process operations and control equipment operating parameters. Such records shall also include reports of all types of process upsets and emission control equipment malfunction, detailing the nature and duration of the upset or malfunction, the expected effects on emissions, and the corrective actions taken or planned to avoid recurrences. Such records shall be available at the plant site for inspection for a period of at least two (2) years.

BEST AVAILABLE COPY

PERMITTEE:
Gulf Coast Recycling,
Inc.

PERMIT/CERTIFICATION NO.: AO29-173310
PROJECT: Blast Furnace and Agglomeration
Furnace

SPECIFIC CONDITIONS: (continued)

19. Pursuant to Rule 1-1.04.1 of the Rules of the Environmental Protection Commission of Hillsborough County and consistent with Specific Condition No. 15, the permittee shall maintain daily records on the number of charges to the blast furnace and the make-up of each charge (i.e., groups, coke, limerock, etc.). The permittee shall also maintain monthly inventory records showing types and quantities of materials charged to the furnace during the month.

20. Pursuant to Chapter 1-3.22(3) of the Rules of the Environmental Protection Commission of Hillsborough County, the permittee shall not allow the discharge of air pollutants which contribute to an objectionable odor.

21. The Environmental Protection Commission of Hillsborough County shall be notified in writing 15 days in advance of any compliance test to be conducted on this source.

22. Submit for this facility, each calendar year, on or before March 1, an emission report for the preceding calendar year containing the following information pursuant to Subsection 403.061(13), Florida Statutes:

- (A) Annual amount of materials and/or fuels utilized.
- (B) Annual emissions (note calculation basis).
- (C) Any changes in the information contained in the permit application.

Duplicate copies of all reports shall be submitted to the Environmental Protection Commission of Hillsborough County.

23. Pursuant to Section 17-4.090, F.A.C., an application for renewal of permit to operate this source, completed in quadruplicate, shall be submitted to the Environmental Protection Commission of Hillsborough County at least 60 days prior to its expiration date.

Originally Issued: July 17, 1990
Amended this 19 day of 1900.

STATE OF FLORIDA DEPARTMENT OF
ENVIRONMENTAL REGULATION

COMMENT - GENERAL CONDITIONS:

The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

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

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

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

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

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

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

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

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

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

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

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

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

In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.113, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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

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

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

This permit also constitutes:

- () Determination of Best Available Control Technology (BACT)
- () Determination of Prevention of Significant Deterioration (PSD)
- () Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
- () Compliance with New Source Performance Standards

The permittee shall comply with the following:

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used;
 - 6. the results of such analyses.

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

APPENDIX B

**EPA MEMO REGARDING
PSD APPLICABILITY**

APPENDIX C

**LETTER FROM CITY OF TAMPA TO
GULF COAST REGARDING
SEWER CAPACITY**

BEST AVAILABLE COPY



CITY OF TAMPA

Sandra W. Freedman, Mayor

Department of Sanitary Sewers

Ralph L. Metcalf, II, P.E.
Director

August 3, 1993

Joyce Morales-Caramela
Gulf Coast Recycling, Inc.
1901 North 66th Street
Tampa, Florida 33619

Re: Allocation of capacity for additional wastewater streams at
Gulf Coast Recycling Plant.

Dear Joyce:

Due to other service commitment allocations and capacity limitations in our downstream gravity collection system, capacity is not presently available in our manifold force main system in 62nd Street to accept all the additional flows specified in your May 14, 1993 letter.

We have no plans to upgrade the collection system prior to calendar year 1998; however, some limited capacity should become available in approximately two (2) years because one of our prior service commitment allocations is only temporary.

Your letter mentioned the need to resume operation of the groundwater recovery system. Please be advised that any flows from this source will need to be controlled so that our present 20 GPM restriction on the total flow from your plant is not exceeded.

In addition, prior to your resuming operation of the groundwater recovery system, we will need groundwater samples from your monitoring wells analyzed to determine the level of Molybdenum. EPA Test Method 246.2 is to be used. Certified test results should be submitted for our review at your earliest convenience.

Permission to resume pumping of groundwater will be contingent on the determination of the Molybdenum concentration and the installation of pretreatment facilities if deemed necessary.

In addition, we request that the analysis of the effluent samples from your existing pretreatment facilities be expanded to include Molybdenum.



6th Floor City Hall Plaza • Tampa, Florida 33602

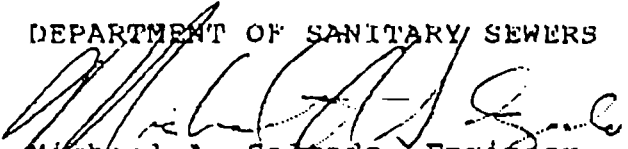
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If possible, the test results should be included in the next report to John Daily of our Industrial Waste Division. This will assist us in the review of your plant's annual Industrial Wastewater Discharge Permit Application.

We trust this letter will meet your present needs. Please contact Bill Schafer at 223-8053 or me at 223-8040 if you have any question regarding this matter.

Sincerely,

DEPARTMENT OF SANITARY SEWERS



Michael A. Salgado, Engineer
Planning Division

MAS/pa

xc: John Daily
Executive
Planning
Engineering

APPENDIX D
1991 LEAD SOURCE TEST

STACK SAMPLING EMISSION REPORT
and
VISIBLE EMISSION TESTS

GULF COAST RECYCLING

Tampa, Florida
October 21 - 25, 1991

STEVENSON & ASSOCIATES
333 Falkenburg Road, Suite B-214
Tampa, Florida 33619

TABLE OF CONTENTS

- 1.0 INTRODUCTION
- 2.0 SOURCE DESCRIPTION
- 3.0 SUMMARY OF RESULTS
- 4.0 SUMMARY OF TEST DATA
- 5.0 SAMPLING EQUIPMENT SKETCHES
- 6.0 PARTICULATE/LEAD SAMPLING & ANALYTICAL PROCEDURES
- 7.0 SO₂ SAMPLING & ANALYTICAL PROCEDURES

APPENDICES

- 8.0 STACK SKETCHES & TRAVERSE POINT LOCATIONS
- 9.0 PRODUCTION DATA
- 10.0 SITE LOCATION SKETCH
- 11.0 FIELD DATA
- 12.0 LABORATORY DATA
- 13.0 CALCULATIONS
- 14.0 CALIBRATION INFORMATION
- 15.0 VISIBLE EMISSION READINGS
- 16.0 PROJECT PARTICIPANTS

1.0

INTRODUCTION

1.0 INTRODUCTION

On October 21, 22, 23, 24 & 25, 1991, Stevenson & Associates, represented by Lynne Stevenson, Ron Oliver and Tim Capelle, conducted emission sampling (EPA Methods 1, 2, 4, 5, 6, and 12) and visible emission (EPA Method 9) tests for Gulf Coast Recycling, 1901 North 66th Street, Tampa, Florida.

These tests were performed to meet compliance test specifications of Permits Nos.: A029-130736/Keel Cast Baghouse; A029-173310/Furnace Tapping, Furnace Charging and Blast Furnace; and, AC29-184883/Refining Baghouse; and, to determine if these sources were operating within the limits of said permits as per requirements of the Hillsborough County Environmental Protection Commission and the State of Florida Department of Environmental Regulation.

2.0 SOURCE DESCRIPTION

2.0 SOURCE DESCRIPTION

Gulf Coast Recycling recovers lead from damaged or spent lead-acid batteries. Battery groups and posts are removed from the batteries and resmelted in a blast furnace. The blast lead is cast into 3,700 pound "buttons". These buttons are then remelted and cast into boat keels or the lead is refined or alloyed to customer specifications. These operations are controlled with five (5) separate collection and discharge systems.

Dust and fumes from the blast furnace and the slagging furnace are collected, routed through a series of cooling loops and forced through a fabric baghouse collector system (10 modules) prior to discharge through a stack. The stack is 36 inches in diameter, 150 feet high with two (2) sample ports located at 45 feet. The sampling ports are located 8 stack diameters upstream and 28 diameters downstream of any flow disturbances. The sulfur dioxide sampling port is located at the same sampling ports.

The blast furnace charging operation is vented through a double module baghouse.

Exhaust hoods covering the blast furnace, lead and slag taps and the slag tap from the slag furnace are vented through a single module baghouse collector and exhausted through a 13-inch square stack that is 45 feet tall. This process is called blast furnace tapping.

The refining kettle ventilation system consists of exhaust hoods enclosing each of three (3) melting kettles and lead drossing bins. The exhaust from these hoods is routed through a two module baghouse and vented through a 22-inch diameter stack that is 25 feet tall.

The keel cast melt kettle is enclosed with a hood that is exhausted to a single module baghouse and vented through a 14.5 inch diameter stack that is 25 feet tall.

3.0 SUMMARY OF RESULTS

3.0 SUMMARY OF RESULTS

The results of the emission testing are presented in the following Tables. The average emission rates for all parameters for all sources were below the allowable rates as specified in the current operating permits. Therefore, these sources were operating within the limits of compliance during the testing on October 21 through October 25, 1991.

The visible emission highest six minute average for all sources was 0%.

No problems were encountered in accomplishing this assignment.

TABLE II

TEST SUMMARY - LEAD

GULF COAST RECYCLING - BLAST FURNACE

October 24, 1991

RUN NO.	LEAD (LBS/HR)	CONCNTRTN (GR/DSCF)	GAS FLOW (ACFM)	GAS FLOW (DSCFM)	VOLM. AIR (VMSTD)	ISOKENET. (%)
1	0.007	0.000039	24,335	20,308	40.06	100.41%
2	0.005	0.000031	24,485	20,321	39.57	99.14%
3	0.007	0.000039	24,243	20,108	39.17	99.17%
AVG.	0.006	0.000036	24,354	20,246	39.60	99.57%

APPENDIX E

1991 NO_x, VOC, AND CO SOURCE TEST

**SOURCE TEST REPORT
for
OXIDES OF NITROGEN, VOLATILE ORGANIC COMPOUNDS
AND CARBON MONOXIDE**

**BLAST FURNACE OUTLET
GULF COAST RECYCLING
TAMPA, FLORIDA**

OCTOBER 21 & NOVEMBER 4, 1991

Prepared for:

**STEVENSON & ASSOCIATES
333 FALKENBURG ROAD N, UNIT A-115
TAMPA, FLORIDA 33619**

Prepared by:

**AIR CONSULTING AND ENGINEERING, INC.
2106 N.W. 67TH PLACE, SUITE 4
GAINESVILLE, FLORIDA 32606
(904) 335-1889**

289-91-07

TABLE OF CONTENTS

<u>SECTION</u>		<u>PAGE</u>
1.0	INTRODUCTION.....	1
2.0	SUMMARY AND DISCUSSION OF RESULTS.....	2
3.0	SAMPLING POINT LOCATION.....	4
4.0	FIELD AND ANALYTICAL PROCEDURES.....	6
4.1	DETERMINATION OF NITROGEN OXIDES--EPA METHOD 7E.....	6
4.2	DETERMINATION OF CARBON MONOXIDE--EPA METHOD 10.....	6
4.3	DETERMINATION OF TOTAL GASEOUS ORGANIC CONCENTRATION USING A FLAME IONIZATION ANALYZER--EPA METHOD 25a.....	9
4.4	DETERMINATION OF OXYGEN IN EMISSIONS FROM STATIONARY SOURCES --EPA METHOD 3A.....	11
4.5	CO2 AND O2 SAMPLING AND ANALYSIS.....	12

APPENDICES

APPENDIX A--FIELD DATA SHEETS AND
FLOW CALCULATIONS

APPENDIX B--EMISSION SUMMARY
AND STRIP CHARTS

APPENDIX C--ORSAT ANALYSIS

APPENDIX D--QUALITY ASSURANCE

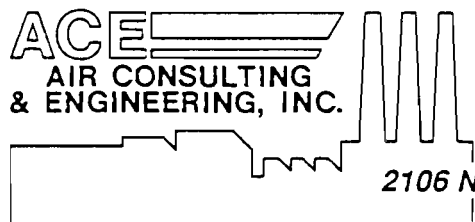
APPENDIX E--PROJECT PARTICIPANTS

LIST OF TABLES

<u>TABLE</u>		<u>PAGE</u>
1	EMISSION SUMMARY.....	3

LIST OF FIGURES

<u>FIGURE</u>		
1	SAMPLE POINT LOCATION.....	5
2	EPA METHOD 7E SAMPLING SCHEMATIC.....	7
3	EPA METHOD 10, 3A SAMPLING SCHEMATIC.....	8
4	EPA METHOD 25A RATFISCH RS55 FIA.....	10



2106 N.W. 67th Place • Suite 4 • Gainesville, Florida • 32606
(904) 335-1889 FAX (904) 335-1891

REPORT CERTIFICATION

To the best of my knowledge, all applicable field and analytical procedures comply with Florida Department of Environmental Regulation requirements and all test data and plant operating data are true and correct.

Dagmar Neck

Dagmar Neck

11/22 / 91

Date

1.0 INTRODUCTION

On October 21, 1991, Air Consulting and Engineering, Inc. (ACE) conducted oxides of nitrogen (NO_x), Carbon Monoxide (CO), and Volatile Organic Compound (VOC) testing on the Blast Furnace Outlet at Gulf Coast Recycling in Tampa, Florida.

Testing was performed using United States Environmental Protection Agency (EPA) Method 7E for NO_x emission determination, EPA Method 10 for CO and EPA Method 25A for VOC. The CO, CO_2 , and O_2 tests were repeated by orsat analysis (EPA Method 3) on November 4, 1991.

This work was done as a subcontract to Stevenson & Associates of Tampa, Florida.

2.0 SUMMARY AND DISCUSSION OF RESULTS

The emission results are summarized in Table 1.

Oxides of nitrogen and VOC emissions averaged 1.98 and 33.10 pounds per hour (lbs/Hr), respectively.

Carbon monoxide testing was repeated by orsat on November 4, 1991, since the CO analyzer results were off scale during the scheduled testing. CO emission averaged 8440 ppm or 683.32 lbs/Hr.

Flow calculations, emission summary with strip chart copies and orsat results are presented in Appendices A, B, and C, respectively.

Table 1 Emission Summary
 Blast Furnace Outlet
 Gulf Coast Recycling
 Tampa, Florida
 October 21, 1991 & November 4, 1991

Run Number	Flow Rate SCFMD	<u>NOx Emissions</u>		<u>VOC Emissions as propane</u>		<u>CO Emissions</u>		
		ppm	lbs/Hr	ppm	lbs/Hr	%	ppm	lbs/Hr
1	18676	17.5	2.34	303	38.77	--	---	-----
2	17974	14.3	1.84	237	29.18	--	---	-----
3	19062	12.8	1.75	240	31.34	--	---	-----
AVERAGE	18571	14.9	1.98	260	33.10	0.844	8440	683.32

lbs/Hr = ppm (2.595 x 10⁻⁹) MW (SCFMD) 60

MW NO_x = 46

MW C₃H₈ = 44

MW CO = 28

10⁶ ppm = 100%

APPENDIX F
SCAQMD CO BACT DETERMINATION

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Best Available Control Technology (BACT) Guideline

Equipment or Process: Lead Melting Furnace - Cupola,
Secondary Melting Operations

Equipment Rating: All

Revision:

Date: 10/07/88

	ROG	NOx	SOx	CO	PART.
BACT Technologically Feasible ¹				Afterburner (≥ 0.3 Sec. Retention Time at ≥ 1400 °F)	
BACT Achieved in Practice or Contained in EPA Approved SIP ²			Scrubber and $\leq 1\%$ Sulfur in Coke	Afterburner (≥ 0.3 Sec. Retention Time at ≥ 1200 °F)	Baghouse
BACT For Small Business ^{1,3}			1. Scrubber and $\leq 1\%$ Sulfur in Coke 2. Scrubber 3. $\leq 1\%$ Sulfur in Coke	1. Afterburner (≥ 0.3 Sec. Retention Time at ≥ 1400 °F) 2. Afterburner (≥ 0.3 Sec. Retention Time at ≥ 1200 °F)	1. Baghouse 2. Venturi Scrubber
Alternate Basic Equipment or Process ¹					

1. Requires Economic Analysis

2. No Economic Analysis

3. Control technologies are in descending order of efficiency. The most efficient control technology must be considered first when conducting an economic analysis.



GULF COAST RECYCLING, INC.

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

October 10, 1995

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

RE: AC 29-209018, PSD-FL-215

RECEIVED

OCT 11 1995

BUREAU OF
AIR REGULATION

Dear Mr. Fancy:

Following are Gulf Coast's responses to the comments received regarding our PSD application of May 1994. Enclosed are six copies of a revised application incorporating our proposal to install a feed desulfurization system to reduce SO₂ emissions and many of the comments and responses below. As calculated in Section 2.1.3 of the revised application, our requested SO₂ emission rate with the desulfurization system is 175 lbs/hr. This information may be helpful as it is used in responding to several of the comments below.

DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) COMMENTS

- 1) DEP requested that all comments received on the PSD application be responded to.

Following are the responses.

- 2) DEP also requested responses to the EPA PSD determination memo dated June 19, 1991.

Following are the responses to each comment:

- 2.1) EPA commented that the PSD process should have been initiated when the new furnace was installed.

A PSD application was deemed not necessary by the DEP at the time of the modification (1984). The EPA later determined that it was necessary on June 19, 1991 (the determination memo). The DEP then requested a PSD application be submitted, which was done in May 1994.

- 2.2) EPA commented that a construction permit application should have been submitted for the new furnace prior to its installation.

A construction permit application was submitted on February 10, 1992. The complete history of this exhaustive process can be found in the construction application.

- 2.3) EPA commented that due to the expected increased in pollutants, PSD review would subject all pollutants to review.

Table 2.1 in the PSD application reviews each pollutant against the PSD thresholds.

- 2.4) EPA commented that Best Available Control Technology (BACT) analysis would be applicable for any pollutants subject to PSD review which exceed their respective significant emissions rate.

As a result of the analysis in Table 2.1, a BACT analysis was performed for SO₂ and CO, which were the only pollutants which exceeded their respective significant emissions rates.

- 2.5) EPA commented that further investigation is warranted into whether VOC emissions from the new furnace exceed the 40 tons/yr limit for NSR.

Table 2.1 shows that the potential emissions increase from VOCs does exceed the 40 tons/yr threshold. However, Gulf Coast has committed to installing an afterburner to reduce CO and VOC emissions. As a result, there will be an overall decrease in VOC emissions of 78.24 tons/yr.

- 2.6) EPA commented that a construction permit application and a PSD application should have been required for kettle #3.

AP-42 section 12.11 for the secondary lead industry states "Kettle furnaces for melting, refining, and alloying are relatively minor emission sources." Uncontrolled emission factors for particulate matter and lead are 0.03 and 0.01 lbs/ton, respectively. At a process rate of 2.2 tons/hr (1/3 of blast rate), maximum uncontrolled emissions from the new kettle would be 0.29 tons/yr PM and 0.10 tons/yr Pb. No emission factor for SO₂ is given. However, it can be assumed SO₂ emissions would not exceed the 40 tons/yr threshold. Regarding the requirement for a state construction application, it is felt that this issue is beyond the scope of this application.

FISH and WILDLIFE SERVICE (FWS) COMMENTS

- 1) Net Emission Increase - FWS commented that they felt baseline emissions used to determine the net emission increase were not based on the correct years.

All modeling and analyses have been performed using the full allowable emission rate from the new furnace, not just the increase over the old furnace. That is, it was assumed there was never a furnace at the facility before the new one was installed. This was done due to the time lag between the modification and the PSD application and for a degree of conservatism. Therefore, since the PSD threshold was triggered for SO₂ and CO and that modeling and the BACT analyses have been performed using 100% of the emissions, the actual increase in emissions over the baseline is irrelevant (because they can not be greater than the emissions from the new furnace).

- 2) Best Available Control Technology (BACT)

- 2.1) FWS commented that only three of the "numerous" technologies available for controlling SO₂ emissions were included in the BACT analysis.

It was stated in the application that "nearly twenty different types of flue gas desulfurization systems have been developed over the years...", not that there were numerous technologies available. Most technologies fall into either dry or wet scrubbing, as was stated in the application. Since there are many different types of scrubbing systems, each with its own minor variations, one wet system and one dry system were selected for analysis. The two chosen are representative of all scrubbing systems in removal efficiencies, costs, and environmental considerations.

- 2.2) FWS commented that the analysis did not compare emission rates and cost effectiveness to similar facilities.

Since Gulf Coast is now proposing to install "controls", it is felt that this concern may now be alleviated.

- 2.3) FWS commented that the analysis should discuss the contribution to SO₂ emissions from the coke used in the process.

The emission rate calculation has been broken down to show the contribution from the coke separately.

- 3) Facility-wide Lead Emission Cap

FWS requested the permit include appropriate enforceable conditions to ensure that PSD review for lead is not triggered, due to Gulf Coast's request for a facility-wide cap of 0.59 tons/yr.

The October 1991 source test showed emissions from the furnace to be 0.006 lbs/hr, which correlates to 0.03 tons/yr for 8,760 hours per year. This is approximately only 5% of the requested limit of 0.59 tons/yr. In addition, Gulf Coast will be subject to the MACT for secondary lead smelters. This will require Gulf Coast to perform an initial lead source test with monitoring of the baghouse performance using broken bag detectors. This program will ensure ongoing compliance (especially with Gulf Coast's actuals being only 5% of requested allowable), alleviating the need to incorporate additional conditions in the permit.

4) Air Quality Modeling Analysis

- 4.1) FWS commented that the emissions increase discussed above (which was thought by the FWS to be underestimated) should be revised and then used in revised modeling.

All previous modeling was performed using the full allowable emission rate from the furnace, not just the emissions increase over the old furnace. In other words, the old furnace emissions were not subtracted from the new furnace emissions to determine the emission rate to incorporate into the model. It was assumed the old furnace did not exist and the entire emissions from the new furnace modeled as if it was a new unit, not a replacement. Therefore, the emissions increase is irrelevant. The revised modeling was based on the requested "controlled" rate of 175 lbs/hr.

- 4.2) FWS had the following comments regarding the Class I MESOPUFF II model:

- 4.2.1) FWS requested that two additional upper air stations (West Palm Beach, FL and Waycross, GA) be used in addition to the one used in the model (Tampa/Ruskin).

As shown in Figure 2 of Appendix L of the previous application, the vast majority of sources are located near the Tampa met station. It is felt that re-running the MESOPUFF II model using upper air stations in Georgia and in West Palm Beach would not significantly influence the sources included in this project and is not, therefore, necessary.

- 4.2.2) FWS commented that the MESOPUFF II analysis only used the SO₂ conversion and dry deposition options for Gulf Coast impacts, not for the

other 137 sources.

This option was used as a conservative factor. The IWAQM allows for SO₂ conversion, dry deposition, and wet removal processes. Each of these processes reduce ambient SO₂ concentrations. Using the SO₂ conversion and dry deposition options for all sources would result in lower impacts. In addition, the use of wet deposition (which was not used for any sources) would significantly reduce impacts at long range. Therefore, it is felt that re-running the MESOPUFF II model using these options is not necessary.

It should be noted that the Level 1 analysis using the ISCST3 model showed a 0.15% exceedance rate. Of that 0.15%, Gulf Coast significantly contributed to 3% of the exceedances. The Level 2 analysis using the MESOPUFF II model then showed Gulf Coast does not significantly contribute to any of the modeled exceedances. Also, the MESOPUFF II model was run with the previous emission rate of 374 lbs/hr, not the 175 lbs/hr rate now requested. In addition, the 175 and 374 lbs/hr are totals ("controlled" and uncontrolled, respectively) from the new furnace, not the increase above the old furnace emissions.

- 4.3) FWS commented that no visibility analysis was performed for the initial application. FWS requested that the EPA model VISCREEN be used to determine visible impacts on the Class I area.

A Level 1 visibility screening analysis was performed using VISCREEN. Model results show that all screening criteria are met (See Section 5.3 in the revised application).

- 4.4) FWS disagreed with the DEP decision to allow the use of an alternate monitoring station to determine background values to be added to the AAQS modeling results.

Preliminary modeling showed that the Davis Island monitor was being impacted by several large utility sources that were also required to be input into the model, resulting in double-counting of their impacts. It was then requested that an alternate monitor be allowed that was not already being impacted by sources that were included in the model. By letter (See Appendix J in the application), DEP allowed the use of the highest monitored annual value at the TECO Big Bend monitor as a representative background value for all three averaging periods. Since this revised modeling (which showed Gulf Coast does not significantly contribute to any modeled AAQS exceedances) was based on DEP guidance, it is felt that additional modeling is not justified.

5) Air Quality Related Values (AQRVs) Analysis

FWS requested that a more detailed analysis be performed on AQRVs in the Class I area to include potential impacts on soils, wildlife, aquatic resources, and lichens.

Due to the results of the Class I modeling which showed that Gulf Coast does not significantly contribute to any modeled exceedance of the Class I increments (which are not the human health-based ambient air quality standards), it is felt that impacts on the above mentioned AQRVs are not significant.

HILLSBOROUGH CO. ENVIRON. PROTECT. COMM. (EPC) COMMENTS

- 1) EPC commented regarding the correlation of process input rates and SO₂ emissions. Specifically, EPC asked how Gulf Coast can assure that the previously requested emission rate of 374 lbs/hr (with a maximum process rate of 6.0 tons/hr) can be met when 1988 and 1993 source tests resulted in emissions of 377 lbs/hr with much lower process rates (4.65 and 4.8 tons/hr, respectively).

SO₂ emissions are not directly correlative to process rates. Emissions are more a function of sulfur content of the feed material than weight. As mentioned previously, Gulf Coast is proposing to install a feed desulfurization system to lower the sulfur content of the feed material and, therefore, SO₂ emissions.

- 2) EPC requested additional information on the proposed afterburner as it relates to the relationship between residence time and destruction efficiencies and how the installation of the afterburner will affect the baghouse performance.

Final design of the afterburner is not yet complete. However, a residence time of 0.5-2.0 seconds, as proposed, has been accepted as sufficient to produce destruction efficiencies as applied for. The SCAQMD BACT guideline in **Appendix F** of the PSD application shows BACT for CO from lead melting furnaces to be an afterburner at ≥ 0.3 seconds retention time and $\geq 1200^{\circ}\text{F}$. Also, see **Appendix P** for an afterburner destruction efficiency curve. In addition, the industry-wide average afterburner temperature and residence time is 1300°F and 1.78 seconds, respectively (*Secondary Lead Smelting Background Information Document for Proposed Standards, Volume 1, Table 3-6; EPA 453/R-94-024b, June 1994*).

The afterburner will be located directly downstream of the furnace prior to the existing cooling loops. The inlet gas temperature to the baghouse will increase approximately 30% to about 200°F , well within the range for the baghouse. The performance of the baghouse will actually improve due to destruction in the afterburner of hydrocarbon

residue (some ash remains) that currently is deposited on the bags. Additional air flow will be created with the afterburner. However, sufficient capacity exists to handle the increased air flow without modification.

- 3) EPC commented that actual emissions from some pollutants were tabulated in Table 2.1 using permitted allowables or maximum emission rates. Actual emissions should be calculated based on actual production rates, compliance tests, and operating information.

Emissions in column one of Table 2.1 for SO₂ and PM have been recalculated to reflect actual emissions.

- 4) EPC requested more information regarding how the formation of SO₂ will be reduced through the process controls and the installation of the afterburner and how CO formation will be minimized by incorporating operating parameters.

It is hoped that this concern will be alleviated with the installation of the desulfurization system and afterburner. However, the operating parameters that were mentioned were regarding the other combustion sources at the facility, which are not included in this application. The burner systems are maintained to ensure complete combustion and thus minimizing CO formation. SO₂ formation is reduced in a furnace that can be operated with a cooler top, thus allowing for a taller column in the furnace. This taller column allows a greater amount of the sulfur to become fixed in the slag thus reducing SO₂ emissions to the atmosphere. However, this will become less of an issue with the desulfurization system.

- 5) EPC requested emissions information for hydrochloric acid (HCl), hydrogen sulfide (H₂S), and sulfuric acid mist (SAM).

Sulfuric acid mist emissions will be greatly reduced due to the desulfurization system replacing the existing battery saw. In EPA's *Secondary Lead Smelting Background Information Document for Proposed Standards*, Volume 2, Appendix D, Table 1-1, they estimate HCl emissions from Gulf Coast to be less than 200 lbs/yr. Since there are no site specific test data, this indicates no concern relative to PSD for HCl. In NESHAP development, EPA chose not to promulgate HCl standards since emissions have steadily dropped over the past several years due to virtual elimination of PVC from battery components.

- 6) EPC commented that emissions from tapping and charging should be calculated separately from the furnace emissions.

AP-42 emission factors for SO₂ from blast furnaces include emissions from tapping and charging operations. Also, the desulfurization system will reduce potential SO₂ emissions

from all three operations simultaneously due to its front-end design. This is quite different than traditional end-of-pipe technologies which would place a scrubber on the main furnace outlet, leaving the charging and tapping emissions uncontrolled. In gathering information for the MACT standard for this industry EPA conducted source tests on various equipment at several sources. These tests included total hydrocarbons (THC) from Gulf Coast's charging ventilation system. The test results, presented on page 3-29 of the Background Information Document mentioned earlier, show that the average THC emission rate was only 0.014 lbs/hr. This is only a fraction of the 33.10 lbs/hr from the main furnace outlet (October 21, 1991 source test), indicating very little metallurgical offgas is pulled into the charging and tapping ventilation systems at Gulf Coast. Therefore, it is felt that emissions from charging and tapping are negligible and that calculating emissions from all three operations collectively is prudent.

- 7) EPC requested Gulf Coast to address how the federally enforceable limitations on operations downstream of the blast furnace may be affected by an increase in the production rates of the blast furnace.

As mentioned earlier, emissions of SO₂ are more of a function of sulfur content in the feed material than weight. This sulfur content will be significantly reduced as a result of this application. CO and VOC emissions will also be reduced. Baghouse efficiencies do not necessarily increase with increased loadings. In fact, in certain situations efficiencies increase due to coating of the bags. Therefore, emissions will be unaffected by an increase in the allowable charge rate. The increase in charge rate to the furnace does not necessarily correlate to an increase in process rates of the furnace. However, the process rates of the kettles will continue to be monitored to ensure they do not exceed allowables. In no way will any applicable NSPS be threatened.

- 8) EPC had the following comments regarding the BACT analysis:

- 8.1) EPC commented that Gulf Coast had indicated previously that the tipping fee for lime waste disposal was \$15/ton and the PSD application used \$250/ton. EPC asked what the latter figure represents and what it was based on.

The \$250/ton disposal fee is based on the assumption that scrubber waste would be classified as hazardous. This assumption was industry as well as EPA standard until recently. One source within the industry petitioned the EPA to reclassify the waste depending on its leachability. It was thought that the waste stream from any scrubber located downstream of the primary control device (baghouse) would have a relatively minor amount of hazardous constituents remaining. Although this is generally true, in today's RCRA Potentially Responsible Party (PRP) environment few sources would find it beneficial in the long run to dispose of waste which knowingly contains any amount of a

hazardous material in a non-hazardous landfill for the sake of saving per-unit costs. It is, therefore, thought that the \$250/ton fee is appropriate.

- 8.2) EPC commented that the economic analysis does not take into account the benefit received by operating the furnace without SO₂ controls since 1984.

It is felt that this type of cost is beyond the scope of an analysis aimed at determining the economic impact various control technologies have on Gulf Coast. The cost benefit suggested is not technology-specific and, therefore, would not aid in the comparison. This past economic benefit could, however, reduce the costs of each technology by the same amount. However, this relative cost reduction is moot since it would not reduce the cost of one technology over the others and because Gulf Coast is now committed to installing "controls".

- 8.3) EPC commented that the option of using the dry scrubbing lime containing waste to treat the waste water on site and then disposing of the filter cake should be addressed and included in the economic feasibility.

It is felt that this comment will be alleviated by Gulf Coasts' proposal to install a feed desulfurization system.

- 8.4) EPC commented that the economic analysis for the scrubbing options should incorporate the benefits obtained by removal of other regulated air pollutants such as acid gases or HAPs.

While this is true, the installation of the desulfurization system and afterburner will also reduce acid gas emissions and organic HAPs, respectively. The existing baghouses already provide maximum control of metal HAPs. Also, as mentioned earlier, in EPA's *Secondary Lead Smelting Background Information Document for Proposed Standards*, Volume 2, Appendix D, Table 1-1; EPA 453/R-94-024b, June 1994, they estimate HCl emissions from Gulf Coast to be less than 200 lbs/yr. Again, since there are no site specific test data, this indicates no concern relative to PSD for HCl. In NESHAP development, EPA chose not to promulgate HCl standards since emissions have steadily dropped over the past several years due to virtual elimination of PVC from battery components. Page 4-16 of the Background Document states that MACT for organic HAPs from existing blast furnaces is based on an afterburner at 1300°F. However, the benefits in question have been incorporated into the environmental impacts of each system.

- 8.5) EPC commented that Gulf Coast should discuss how economic feasibility is being determined and what the proposed costs are being compared or evaluated against.

The proposed costs of the three representative control systems are being compared against each other in order to rank them according to cost. Economic feasibility is, therefore, being determined by comparing the costs of each technology and how they relate to the revenues of Gulf Coast. It would be unjust to compare the economic impact of these systems on Gulf Coast to the economic impact of these systems on a facility of different size and configuration, let alone a different industry.

- 9) EPC requested information on how Gulf Coast will provide offsets to alleviate the modelling exceedance of the 3-hour SO₂ standard indicated in Table 4.3 of the previous application. EPC states that neither they or the DEP "is in a position to authorize any increase in emissions, regardless of the level of significance, when an ambient standard is being exceeded".

The PSD regulations allow for this extra step in modeling exercises. This extra step allows the permittee to show that, with the conservatism inherent in the model, that they are not the cause of the predicted exceedance(s), if any. This conservatism is apparent in the fact that the DEP's monitors show the area to be in attainment of the AAQS, but the model shows some impacts above AAQS limits.

In addition, as discussed at length in the application, the surrounding source inventory that was required to be included in the model was such that the ambient standards were predicted to be exceeded with Gulf Coast's emissions set at zero. This means that without the extra step of determining if Gulf Coast is significantly contributing to these modelled exceedances, they could not even be allowed for an increase of 0.00001 lbs/hr. The implication of a policy not allowing the extra step in the modeling would be that, even though the Tampa area is classified as an attainment area for permitting purposes, there would have to be a no-growth policy implemented until a sufficient number of emission sources were shut down to allow the model not to predict any exceedances.

Also, as stated previously, the emission rate that was used in the model was the total from the new furnace, not the increase over those from the old furnace. This means that even if the old furnace emissions were modeled, assuming the new furnace did not emit at greater amounts (and therefore PSD would not even have been required), the AAQS would still be predicted to be exceeded. It is, therefore, felt that offsets should not be required for this application located in an attainment area.

It appears that there is a common issue to many of the comments received. The issue has its roots in how the emission rates were calculated and how they affected the BACT analyses and modeling. We will concentrate on SO₂. Due to the time lag between the decommissioning of the old furnace and the submittal of the PSD application it was decided that the full requested (allowable) emission rate from the new furnace would be used for all analyses and modeling.

This was in lieu of determining the actual emissions increase over and above emissions from the old furnace. In other words, it was assumed the old furnace never existed and that Gulf Coast was applying to increase SO₂ emissions by the total potential amount emitted from the new furnace. This was incorporated throughout the application. This underlying issue has the following ramifications:

- 1) Concerning the modeling, the emission rate used for Gulf Coast (in both the previous and the revised PSD applications) was very conservative. Even with this rate, the Class II modeling results averaged only 50% of the allowable increments over all three averaging periods. The AAQS and Class I results each showed a low percentage of exceedances but that Gulf Coast was not significantly contributing to those exceedances.
- 2) Concerning the BACT analysis, by using the higher emission rate, the cost of the control systems per ton of SO₂ removed is lower because larger reductions are realized than with a lower uncontrolled emission rate.
- 3) Concerning the PSD applicability analysis in Table 2.1 of the previous application, several commenters were concerned that the SO₂ emissions increase was underestimated. By using the emission rate described above, it has been guaranteed that the emission rate used throughout the application is greater than the actual emissions increase. This overestimation is guaranteed by 1) the increase in emissions from the old furnace to the new furnace can not be greater than the emissions from the new furnace (unless the old furnace had a negative emission rate), and 2) the emission rate described above (the 374 and 175 lbs/hr) is the requested allowable, not the estimated actual.

In summary, great conservativeness has been incorporated throughout both applications. This was done to alleviate some uncertainty in the conclusions drawn in the applications should actual emissions increase closer to allowables. Unfortunately, this conservatism has apparently instead increased the uncertainty which led to several of the comments that were received. We have attempted to address all of the comments and hope a few of them are no longer current given our proposal to install a desulfurization system that will reduce our emissions. We hope this satisfies all of the requirements of your Completeness Review dated June 28, 1994.

One piece of information which is not included in this package are the final results from the AAQS modeling. The five years were re-run with the new 175 lbs/hr emission rate with the same basic results as the previous application: some exceedances were predicted but Gulf Coast was not significantly contributing. (These results are included in Appendix N of the application.) Upon further review of the surrounding source inventory some apparent errors were discovered. There were several large sources included in the inventory who had listed emission rates ranging from 1,133.36 lbs/hr to 78,965.00 lbs/hr. If these rates are indeed in

Mr. C. H. Fancy
October 10, 1995
Page 12

error, it is not known exactly how much of a reduction in the modeled impacts will occur if re-modeled. However, it is assured the impacts would be no higher than those listed in the revised application. It is hoped that these rates are in error and that revised modeling will not predict any AAQS exceedances. Lake Engineering has been in contact with the DEP modeling section to resolve this issue.

Again, enclosed are six copies of a revised application that incorporates much of the comments received and the subsequent responses outlined above. Please note that the revised application is only one volume. Volume II of the previous application contained the Class II and AAQS modeling output files. These revised output files, along with the respective revised input files, are included on diskette only in this application. Volume III of the previous application contained the Class I modeling output files. Since these modeling results remain unchanged, this volume is not being re-submitted.

We sincerely appreciate your patience in this project and look forward to the issuance of a PSD permit. If you have any questions or require additional information please contact me at (813) 626-6151 or Larry Carlson of Lake Engineering, at (770) 395-0464.

Sincerely,

GULF COAST RECYCLING, INC.

Willis M. Kitchen / LGR

Willis M. Kitchen
President

WK:lc
Enclosures

Tues. 10/10

RECEIVED

OCT 11 1995

BUREAU OF
AIR REGULATION

~~Mr. Fancy,~~

Section 6.0, the Application Forms,
will be overnighted to you on Wed, 10/11
for arrival to you on Thurs. 10/12.

Thanks,

Larry Carlson
Lake Engineering, Inc.
(770) 395-0464

Kim - When the Application forms come,
send them to same people who get
what was already received (plus Cindy)

al

10-9-95

I N T E R O F F I C E M E M O R A N D U M

Date: 09-Oct-1995 12:35pm EST
From: Doug Beason TAL
BEASON_D
Dept: Office General Counsel
Tel No: 904/488-9730
SUNCOM:

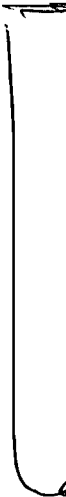
TO: John Reynolds TAL
TO: Alvaro Linero TAL

(REYNOLDS_J)
(LINERO_A)

Subject: Gulf Coast Recycling

I have asked my secretary to prepare an order denying the request for an extension of time. I'll be out of town until 10/11 but if there is something I need to know you can use e-mail. Otherwise, the denial will be sent out. The applicant alleges someone with the DEP agreed to the extension.

Please give me a call if you have any questions.



I'll E-mail him -

Al

~~John Reynolds~~

al f.

10/9

GULF COAST LEAD SHOULD BE
SENDING US A PACKAGE ON
WEDNESDAY ACCORDING TO THEIR
CONSULTANT.

Clair

See next page !!

Clair - ① I'll E-Mail Doug Deason to halt
Final Order which is being prepared to Deny.

② New application will be a long range
project. They will continue to operate w/o valid
PSD permit. I recommend putting all this
into a consent order.

③ Shall we discuss w/Pennington whether to
use our procedures or let HCERC implement
its Compliance/Enforcement procedures?

- We should deny application + treat new plan
as entirely new project for "compliance with ^{new of} future MACT rule"

If you have any questions, please call call Carita Sims, Linda Dickey, Anne Augustine-Parker or John Carmack at (904)488-2996 or SC 278-2996 or the Division of State Employees' Insurance at 1-800-226-3734.

Thank you.

Oct-6-95

INTEROFFICE MEMORANDUM

Date: 06-Oct-1995 12:28pm EST
From: Alvaro Linero TAL
LINERO_A
Dept: Air Resources Management
Tel No: 904/921-9532
SUNCOM: 291-9532

TO: Clair Fancy TAL (FANCY_C)

Subject: FWD: Gulf Coast Recycling

Clair. I just wanted you to get a copy of this. We need to talk about Gulf Coast soon. Thanks.

al

I told consultant if he got info submitted within 30 days, we would consider, if not, would deny; likely turn over to EPA. I told him (consultant) if they turned over to lawyer's asked for hearing I would likely defer to EPA. You, John I need to discuss; likely likely on call with their consultant.
Al

I N T E R O F F I C E M E M O R A N D U M

Date: 05-Oct-1995 10:03am ES
From: John Reynolds TAL
REYNOLDS_J
Dept: Air Resources Manageme
Tel No: (904)488-1344
SUNCOM: 278-1344

TO: Doug Beason TAL (BEASON_D)

CC: Alvaro Linero TAL (LINERO_A)

Subject: Gulf Coast Recycling

Gulf Coast Recycling called again today regarding the status of their permit application. It would be appreciated if OGC would confirm that Gulf Coast must publish the notice of intent to deny before pursuing the extension of time for filing a petition (see our E-mail of Oct. 3). We need your response today if possible.

10-5-95

I N T E R O F F I C E M E M O R A N D U M

Date: 05-Oct-1995 10:03am ES
From: John Reynolds TAL
REYNOLDS_J
Dept: Air Resources Manageme
Tel No: (904)488-1344
SUNCOM: 278-1344

TO: Doug Beason TAL (BEASON_D)

CC: Alvaro Linero TAL (LINERO_A)

Subject: Gulf Coast Recycling

Gulf Coast Recycling called again today regarding the status of their permit application. It would be appreciated if OGC would confirm that Gulf Coast must publish the notice of intent to deny before pursuing the extension of time for filing a petition (see our E-mail of Oct. 3). We need your response today if possible.

10-3-95

I N T E R O F F I C E M E M O R A N D U M

Date: 03-Oct-1995 10:14am ES
From: John Reynolds TAL
REYNOLDS_J
Dept: Air Resources Manageme
Tel No: (904)488-1344
SUNCOM: 278-1344

TO: Doug Beason TAL (BEASON_D)

CC: Alvaro Linero TAL (LINERO_A)

Subject: Gulf Coast Recycling

This is to advise OGC that the Bureau of Air Regulation believes that Gulf Coast Recycling's recent request for extension of time should not be granted for the reasons listed below:

On August 21 we requested OGC's opinion (via E-Mail) regarding wording of our proposed Intent to Deny Permit for the subject company. Hearing no objections from OGC, we issued the Intent on September 8. On September 29, Gulf Coast filed a request for extension of time until December 1 to file a petition, stating that they intend to file a "revised permit" (application), and that whether or not they file for a hearing will depend on the Department's response to their "revised" application.

The "revised" application proposal avoids the issue which is the failure to submit the additional information required. The applicant refused to provide information and now seeks to avoid a permit denial by revising the application at the last moment. The terms of the Intent to Deny state that the applicant must publish the Notice of Intent in order to preserve the right to appeal. We believe that the request for extension of time should be denied unless Gulf Coast publishes the notice. After denial, they can file a new application vs. revising the current one.

By the way, they refer to the extension as having been agreed to by the Department. Their consultant did talk with Clair but he says he made no agreement nor did anyone else in our Bureau.

9-29-95

RECEIVED

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION SEP 29 1995

Bureau of
Air Regulation

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

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 an extension of time to file its formal Petition For Administrative Hearing, and in support hereof says:

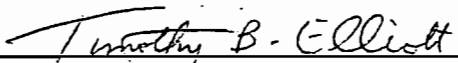
1. Gulf Coast was issued a Notice of Intent to Deny a PSD permit.
2. After discussion with DEP representatives, Gulf Coast will revise its permit to conform to the agreed upon terms.
3. Subject to DEP's response to the revised permit, Gulf Coast asserts that a formal challenge to the Agency action should not be required and therefore requests an extension of time to file a §120.57 petition until December 1, 1995.
4. The Florida Department of Environmental Protection ("DEP"), agrees to this extension request.
5. In the event this request for extension is not granted, this Motion shall serve as notice of intent by Gulf Coast to seek

a formal administrative review pursuant to Section 120.57, Florida Statutes.

WHEREFORE, Gulf Coast respectfully requests an extension of time until December 1, 1995 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 Hand Delivery, 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 28th day of September, 1995.

Respectfully submitted,


TIMOTHY B. ELLIOTT
Fla. Bar No. 0210536
WILLIAM B. TAYLOR, IV, ESQUIRE
Fla. Bar No. 144329
Macfarlane Ausley Ferguson
& McMullen
Post Office Box 1531
Tampa, Florida 33601
(813) 273-4228
Attorney for Petitioner

cc: Gulf Coast Recycling, Inc.



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

September 8, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

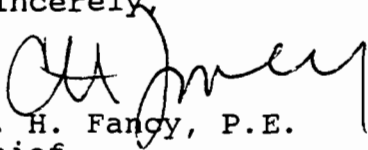
Mr. Willis M. Kitchen, President
Gulf Coast Recycling, Inc.
1901 North 66th Street
Tampa, Florida 33619

Dear Mr. Kitchen:

Enclosed is a copy of the Intent to Deny Permit and Notice of Intent to Deny Permit pursuant to the construction permit application filed by Gulf Coast Recycling, Inc., on May 31, 1994. The permit will be denied for failure to submit the additional information requested on June 28, 1994.

If the company intends to remain in operation, a new PSD application must be submitted within a reasonable time covering installation of air pollution control equipment that will meet all applicable regulations. If you have any questions, please contact our office at 904-488-1344.

Sincerely,


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

CHF/jrt

Enclosures

cc: W. Thomas, SWD
L. Deken, EPCHC
J. Harper, EPA
J. Bunyak, NPS
M. Sappington, Lake Eng.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CERTIFIED MAIL

In the Matter of an
Application for Permit by:

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

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

INTENT TO DENY PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to deny an air construction permit for the applicant's facility as detailed in the application specified above.

The applicant, Gulf Coast Recycling, Inc., applied on May 31, 1994, to the Department for an after-the-fact construction permit in accordance with federal Prevention of Significant Deterioration (PSD) regulations for its facility located in Hillsborough County. The permit is being denied for lack of a timely response to the Department's request for additional information submitted in June 1994.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.).

Pursuant to Section 403.815, F.S., and Rule 62-103.150, F.A.C., to preserve your right of appeal you (the applicant) may publish at your own expense the enclosed Notice of Intent to Deny Permit. The notice should 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 was to have taken place. Proof of publication should be mailed to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within seven days of publication.

The Department will deny the permit unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. 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, F.S.

The Petition shall contain the following information;

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department 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 Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department'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 Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department 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 intent in the Office of General Counsel at the above address of the Department. 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 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION




C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that all copies of this INTENT TO DENY PERMIT were mailed by certified mail before the close of business on 9-12-95 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to
§120.52(11), Florida Statutes,
with the designated Department
Clerk, receipt of which is hereby
acknowledged.

 9-12-95
Clerk Date

Copies furnished to:

- W. Thomas, SWD
- L. Deken, EPCHC
- J. Harper, EPA
- J. Bunyak, NPS
- M. Sappington, Lake Eng.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF INTENT TO DENY PERMIT

PSD-FL-215

The Department of Environmental Protection (Department) gives notice of its intent to deny an air construction permit to Gulf Coast Recycling, Inc., 1901 North 66th Street, Tampa, Florida 33619. This company operates a battery recycling facility at that address. Gulf Coast Recycling, Inc., applied on May 31, 1994, to the Department for an after-the-fact construction permit in accordance with federal Prevention of Significant Deterioration (PSD) regulations for its facility located in Hillsborough County. The permit is being denied for lack of a timely response to the Department's request for additional information submitted in June 1994.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. 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, F.S.

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department 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 Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department'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 Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and, (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department 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 intent in the Office of General Counsel at the above address of the Department. 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 28-5.207, F.A.C.

The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive
Tallahassee, Florida 32301

Department of Environmental Protection
Southwest District
8407 Laurel Fair Circle
Tampa, Florida 33619

Environmental Protection Commission
of Hillsborough County
1900 9th Avenue
Tampa, Florida 33605

Any person may send written comments on the proposed action to Administrator, New Source Review Section, Bureau of Air Regulation, at the Department's Tallahassee address. All comments received within 30 days of the publication of this notice will be considered.

Further, a public hearing can be requested by any person(s). Such requests must be submitted within 30 days of this notice.

Is your RETURN ADDRESS completed on the reverse side?

- SENDER:**
- 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 that we can return this card to you.
 - Attach this form to the front of the mailpiece, or on the back if space does not permit.
 - Write "Return Receipt Requested" on the mailpiece below the article number.
 - The Return Receipt will show to whom the article was delivered and the date delivered.

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

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

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

4a. Article Number
 Z 127 632 517

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

7. Date of Delivery
 9/14/95

5. Signature (Addressee)

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

6. Signature (Agent)

Thank you for using Return Receipt Service.

Z 127 632 517



Receipt for Certified Mail

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

PS Form 3800, March 1993

Sent to	Willis M. Kitcher
Street and No.	Gulf Coast Recy.
City, State and ZIP Code	Tampa, FL
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	9-12-95
	AC 29-7007018
	PSD-F1-215



GULF COAST RECYCLING, INC

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

August 29, 1995

RECEIVED
SEP 1 1995
Bureau of
Air Regulation

Mr. Clair Fancy, Bureau Chief
Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
2600 Blair Stone Road, Mail Station #5500
Tallahassee, Florida 32399-2400

Re: Ammendment to Application No. AC29-209018/PSD-FL-215

Dear Mr. Fancy:

Gulf Coast Recycling, Inc. (GCR) is requesting an increase in its allowable Blast Furnace process input (charge) rate from the current 4.58 tons per hour to 6.5 tons per hour. GCR is not, however, requesting to increase its allowable emissions from the furnace. This request is based on past source tests which show actual emissions to be well below that allowed at a higher process input rate (see November 1 - 3, 1994 source test data). The table below summarizes the source results and calculates an emission factor based on charge rates.

Test Date	Charge Rate	Emissions Lbs/Hr. Pb	Pb E.F. Lbs/Ton	Emissions Lbs/Hr. PM	PM E.F. Lbs/Ton
10/24/91	4.78	0.006	0.00126	0.798	0.16695
11/1-3/95	6.14	0.01	0.00163	0.16	0.02606

Emission Factors (E.F.) calculated by dividing respective Emissions by Charge Rate

Mr. Clair Fancy
August 29, 1995
Page 2 of 3

If the higher lead and particulate matter emission factors are used (0.00163 lbs/ton and 0.16695 lbs/ton respectively), resultant emissions with the increased input rate would be 0.0011 lbs Pb/hr and 1.085 lbs PM/hr:

6.5 tons charged/hr x 0.00163 lbs Pb/ton charged = 0.011 lbs Pb/hr vs. 0.134 lbs/hr current allowable

6.5 tons charged/hr x 0.16695 lbs PM/ton charged = 1.085 lbs PM/hr vs. 2.15 lbs/hr current allowable

The resultant lead emission rate is less than 9% of the allowable rate of 0.134 lbs/hr which was requested in the facility, pending PSD application. GCR is currently permitted for 1.81 lbs Pb/ hour. The resultant particulate matter emission rate is approximately 50% of the current permitted rate of 2.15 lbs/hr. These emission rates indicate that an increase in the blast furnace process input rate will not result in emissions of lead and particulate matter that would exceed the current allowable emission rates. Emission rates of other pollutants will not be affected by an increase in the process input rate as they are not directly related by the furnace charge rate. A copy of the applicable page from the PSD application reflecting the requested process input rate change is also attached.

Mr. Clair Fancy
August 29, 1995
Page 3 of 3

Should you have any questions or comments concerning the above, please contact me or George Townsend at (813) 626-6151. You may also contact Larry G. Carlson, Lake Engineering, Inc., at (770) 395-0464.

Sincerely,

Willis M. Kitchen

Willis M. Kitchen
President

pc: Larry G. Carlson, Lake Engineering, Inc.
William B. Taylor

cc: *J. Reynolds*
C. Holladay
SWO

File:GTA4-434

EPA

NPS

D. Beason, OGC

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Lead Scrap	Pb, PM, Sulfur	5,45,55	10,300	
Coke	PM	100	910	
Limestone	PM	100	325	
Cast Iron	PM	100	325	
Rerun Slag	PM	100	1,140	

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 13,000

2. Product Weight (lbs/hr): 7,900

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

See Table 2.1

Name of Contaminant	Emission ¹		Allowed Emission ² Rate per Rule 17-2	Allowable ³ Emission lbs/hr	Potential ⁴ Emission		Relate to Flow Diagram
	Maximum lbs/hr	Actual T/yr			lbs/yr	T/yr	
SO ₂	374.00	1,638.1	N/A	N/A	N/A		
Pb	0.13	0.6	2.09 lb/hr ⁵	2.09	120,000	60	
PM	3.20	14.0	0.022 gr/dsc ⁶	3.82	2,800,000	1,400	
CO	68.33	299.3	N/A	N/A	5,986,000	2,993	
NO _x	1.98	8.7	N/A	N/A	N/A		
VOC	1.7	7.25	N/A	N/A	290,000	145	

²Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

³Calculated from operating rate and applicable standard.

⁴Emission, if source operated without control (See Section V, Item 3).

⁵ 40 CFR 52.535 (c)(1)(i)

⁶ PS Subpart L (40 CFR 60.120)

TABLE I

TEST SUMMARY - PARTICULATE
GULF COAST RECYCLING - BLAST FURNACE

October 24, 1991

RUN NO.	PARTICLT. (LBS/HR)	CONCNTRTN (GR/DSCF)	GAS FLOW (ACFM)	GAS FLOW (DSCFM)	VOLM. AIR (VMSTD)	ISOKENET. (%)
1	1.254	.0072035	24,335	20,308	40.06	100.41%
2	0.679	.0038992	24,485	20,321	39.57	99.14%
3	0.462	.0026788	24,243	20,108	39.17	99.17%
AVG.	0.798	0.004594	24,354	20,246	39.60	99.57%

TABLE II
TEST SUMMARY - LEAD
GULF COAST RECYCLING - BLAST FURNACE

October 24, 1991

RUN NO.	LEAD (LBS/HR)	CONCNTRTN (GR/DSCF)	GAS FLOW (ACFM)	GAS FLOW (DSCFM)	VOLM. AIR (VMSTD)	ISOKENET. (%)
1	0.007	0.000039	24,335	20,308	40.06	100.41%
2	0.005	0.000031	24,485	20,321	39.57	99.14%
3	0.007	0.000039	24,243	20,108	39.17	99.17%
AVG.	0.006	0.000036	24,354	20,246	39.60	99.57%

STATEMENT OF PROCESS WEIGHT RATE

Gulf Coast Recycling, Inc.

1901 North 66th Street, Tampa, FL 33619

Operation: Blast Furnace Stack

Test Date: 10/24/91

Operation

Sampling Time

Start: 0700

Start: _____

End: 0700

End: _____

Elapsed Time: 24 Hours

Idle Time During Cycle: 0 Hours

Data On Actual Process Rate During Operation Cycle

Material: Lead Scrap Rate: 8,000 Lbs/Hr.

Material: Coke Rate: 640 Lbs/Hr.

Material: Limestone Rate: 200 Lbs/Hr.

Material: Cast Iron Rate: 275 Lbs/Hr.

Material: Re-Run Slag Rate: 445 Lbs/Hr.

Material: _____ Rate: _____ Lbs/Hr.

Total Process Weight Rate: 4.78 Tons/Hour

Product: Blast Lead

Product Rate: 139,400 Lbs Total 2.90 Tons/Hr.

Signature: Neil N. Oakes Date: 11-12-91

Title: Plant Engineer

REGULATORY SUMMARY
GULF COAST RECYCLING
NOVEMBER 1-3, 1994

NEDS NO. PERMIT NO.	EPA METHOD	METHOD DESCRIPTION	ACTUAL EMISSION RATE	ALLOWABLE EMISSION RATE	PROCESS RATE TONS PER HOUR	
					ACTUAL	PERMIT
0057 AO29-173310	1-5	PARTICULATE			6.14	4.58
BLAST		lbs/hour	0.16	2.15		
TAPPING		lbs/hour	0.01	0.40		
CHARGING		lbs/hour	0.02	0.65		
AO29-173309	12	LEAD			4.65	5
REFINING		lbs/hour	0.12	4.04		
AO29-173310					6.14	4.58
BLAST		lbs/hour	0.01	1.81		
		TAPPING	lbs/hour	0.00	0.06	
		CHARGING	lbs/hour	0.00	0.22	
AO29-173309	6	SO₂			4.65	5
REFINING		lbs/hour	0.00	0.20		
BLAST		lbs/Hour	337.9	384.2	6.56	4.58
	9	VISIBLE EMISSIONS				
BLAST		% Opacity	0	≤ 5		
TAPPING		% Opacity	0	≤ 5		
CHARGING		% Opacity	0	≤ 5		
REFINING	% Opacity	0	≤ 5			

8-28-95

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION) ② H. John Reynolds
2. David Cliff ~~3. [unclear]~~
3. [unclear] ~~4. [unclear]~~

- PLEASE PREPARE REPLY FOR:
- SECRETARY'S SIGNATURE
 - DIV/DIST DIR SIGNATURE
 - MY SIGNATURE
 - YOUR SIGNATURE
 - DUE DATE _____
- ACTION/DISPOSITION
- DISCUSS WITH ME
 - COMMENTS/ADVISE
 - REVIEW AND RETURN
 - SET UP MEETING
 - FOR YOUR INFORMATION
 - HANDLE APPROPRIATELY
 - INITIAL AND FORWARD
 - SHARE WITH STAFF
 - FOR YOUR FILES

COMMENTS:

~~Please let me know who is really handling this project.~~

~~Thank you,~~

~~① Kancave~~

~~- Any idea if Clair signed a denial to these guys? NO~~

~~② John Reynolds - Did you change date on denial and give to Clair?~~

FROM: Kanawha DATE: 8 Sept 95 PHONE: 19535

File



GULF COAST RECYCLING, INC.

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

August 28, 1995

RECEIVED

SEP 7 1995

Bureau of Air Monitoring
& Mobile Sources

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

RE: AC29-209018, PSD-FL-215

Dear Mr. Fancy:

Gulf Coast Recycling, Inc. (GCR) would like to thank the Department for the patience and consideration shown the Company in dealing with the issues of PSD and controls for sulfur dioxide emissions.

Please be advised that the final proposed MACT standard does not require that the secondary lead industry install scrubbers for HCl controls, as such, front-end desulfurization was an option GCR was able to consider for the control of SO2 emissions.

GCR has carefully reviewed all of its options and has decided that front-end desulfurization is by far the best alternative for its facility in Tampa, Florida.

The desulfurization equipment will be purchased from MA Industries in Peachtree, Georgia. The desulfurization project is expected to cost between \$1.5 and \$2 million dollars. Additional monies will be required to construct and install an afterburner, and improve overall furnace ventilation to minimize fugitive emissions for lead and particulates.

Following is the anticipated schedule for implementation:

1. December 15, 1995 - Secure financing for desulfurization project, installation of afterburner and ventilation improvements. Several options are already under investigation.
2. January 15, 1996 - Place order with MA Industries. (The order cannot be placed until funds are available since a 25% deposit is required at the time the order is placed.)

C. H. Fancy
August 28, 1995
Page Two

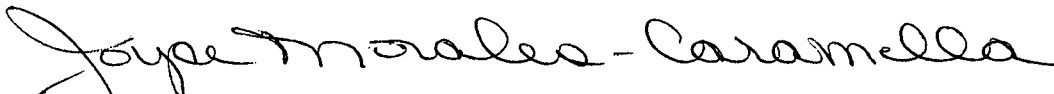
3. February 15, through July 1, 1996, Construct foundation, building, supports, etc., as necessary for new equipment.
4. July 15, 1996 - Desulfurization equipment to be delivered to GCR.
5. October 15, 1996 - Complete installation of MA Industries equipment.

I trust the information provided responds to the request for additional information regarding the control of SO2 emissions. Applications for city building and DEP construction permits will be prepared and submitted, as necessary, soon after the order is placed with MA Industries. Drawings necessary to secure said permits will not be made available to GCR until such time as an order is placed and the 25% deposit is received by MA Industries.

If you have any questions or require additional information regarding the desulfurization process selected please do not hesitate to contact me or George Townsend, at 813/626-6151. If you desire, Gulf Coast Recycling, Inc. would be happy to meet with you and your staff in Tallahassee.

Sincerely,

GULF COAST RECYCLING, INC.


Joyce Morales-Caramella
Environmental & Health Manager

cc John Reynolds
Cleve Holladay
SWD
EPA
NPS
D. Beason, OGC

August 24, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Dear Mr. Kitchen:

Enclosed is a copy of the Intent to Deny Permit and Notice of Intent to Deny Permit pursuant to the construction permit application filed by Gulf Coast Recycling, Inc., on May 31, 1994. The permit must be denied for failure to submit the additional information requested on June 28, 1994.

If the company intends to remain in operation, a new PSD application must be submitted within a reasonable time covering installation of air pollution control equipment that will meet all applicable regulations. If you have any questions, please contact our office at 904-488-1344.

Sincerely,

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

CHF/aal/t

Enclosures

cc: W. Thomas, SWD
L. Deken, EPCHC
J. Harper, EPA
J. Bunyak, NPS
M. Sappington, Lake Eng.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

CERTIFIED MAIL

In the Matter of an
Application for Permit by:

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

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

INTENT TO DENY PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to deny an air construction permit for the applicant's facility as detailed in the application specified above.

The applicant, Gulf Coast Recycling, Inc., applied on May 31, 1994, to the Department for an after-the-fact construction permit in accordance with federal Prevention of Significant Deterioration (PSD) regulations for its facility located in Hillsborough County. The permit is being denied for lack of a timely response to the Department's request for additional information submitted in June 1994.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, Florida Administrative Code (F.A.C.).

Pursuant to Section 403.815, F.S., and Rule 62-103.150, F.A.C., to preserve your right of appeal you (the applicant) may publish at your own expense the enclosed Notice of Intent to Deny Permit. The notice should 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 was to have taken place. Proof of publication should be mailed to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within seven days of publication.

The Department will deny the permit unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. 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, F.S.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department 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 Department's action or proposed action;

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

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,

(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department 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 intent in the Office of General Counsel at the above address of the Department. 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 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that all copies of this INTENT TO DENY PERMIT were mailed by certified mail before the close of business on _____ to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk

Date

Copies furnished to:

W. Thomas, SWD
L. Deken, EPCHC
J. Harper, EPA
J. Bunyak, NPS
M. Sappington, Lake Eng.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF INTENT TO DENY PERMIT

PSD-FL-215

The Department of Environmental Protection (Department) gives notice of its intent to deny an air construction permit to Gulf Coast Recycling, Inc., 1901 North 66th Street, Tampa, Florida 33619. This company operates a battery recycling facility at that address. Gulf Coast Recycling, Inc., applied on May 31, 1994, to the Department for an after-the-fact construction permit in accordance with federal Prevention of Significant Deterioration (PSD) regulations for its facility located in Hillsborough County. The permit is being denied for lack of a timely response to the Department's request for additional information submitted in June 1994.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of their receipt of this intent, whichever first occurs. 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, F.S.

The Petition shall contain the following information; (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department 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 Department's action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department'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 Department's action or proposed action; (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and, (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this intent. Persons whose substantial interests will be affected by any decision of the Department 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 intent in the Office of General Counsel at the above address of the Department. 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 28-5.207, F.A.C.

The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive
Tallahassee, Florida 32301

Department of Environmental Protection
Southwest District
8407 Laurel Fair Circle
Tampa, Florida 33619

Environmental Protection Commission
of Hillsborough County
1900 9th Avenue
Tampa, Florida 33605

Any person may send written comments on the proposed action to Administrator, New Source Review Section, Bureau of Air Regulation, at the Department's Tallahassee address. All comments received within 30 days of the publication of this notice will be considered.

Further, a public hearing can be requested by any person(s). Such requests must be submitted within 30 days of this notice.

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

PERMITTEE:

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

PERMIT/CERTIFICATION

Permit No.: AC29-258634
 County: Hillsborough
 Expiration Date: 06/15/96
 Project: Secondary Lead Smelting
 Facility

8-1-95

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 62-209, 62-210, 62-212, 62-272, 62-275, 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 facility recycles spent automotive and industrial lead acid batteries to produce lead ingots. Batteries arrive by truck. The batteries are cut open and the acid is separated in a settling tank. A tumbler separates the lead battery groups from the casing. The casings are reduced by a hammermill and then sent into a flotation and separation device. Separated plastics are blown into trucks and battery posts are routed to the refining operation. Lead bearing muds and rubber from the separation/flotation process are sent to the blast furnace along with sludge from the acid settling tank.

Battery groups are stored in piles in a partially enclosed structure. One blast furnace is used for the melting of battery groups and plant scrap lead, coke, limerock, cast iron, and re-run slag are charged to the furnace 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 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 52-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 to stabilize the slag. The resulting mixture is used for construction projects at the facility or disposed of off site.

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certification No.: AC29-258634
Project: Secondary Lead Smelting
Facility

PROCESS DESCRIPTION: (continued)

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 modelled 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 emissions of particulate matter and lead from process operations and the 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 nitrogen oxides, carbon monoxide, sulfur dioxide, and volatile organic compounds from the furnace operations are uncontrolled.

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)

Replaces Permit No.: AC29-184883, AC29-217704

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certification No.: AC29-258634
Project: Secondary Lead Smelting
Facility

SPECIFIC CONDITIONS:

1. A part of this permit is the attached General Conditions. [Rule 62-4.160, F.A.C.]
2. All applicable rules of the Environmental Protection Commission of Hillsborough County including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction. [Rule 62-4.070(7), F.A.C.]
3. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-209, 62-210, 62-212, 62-272, 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.]
4. The total emissions from the secondary lead smelting facility shall not exceed 45 tons of particulate matter and 7.6 tons of lead for any consecutive twelve month period. Total emissions of other pollutants emitted by the furnace operation are being addressed in a pending PSD construction application reference DEP File No. 209018, PSD-FL-215. [Construction Application dated 09/30/94]
5. Hours of operation shall not exceed 7,800 hours for blast furnace operation, 6000 hours for refining operation, and 1664 hours for slag processing operation for any consecutive twelve month period. [AC29-184883, AC29-217704, and Construction Application dated September 30, 1994]
6. The permittee shall not cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320, F.A.C.]

Emission Limitations

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

7. The permittee shall not allow lead emissions to exceed the following:
 - A) 0.010 grains/dscf and 3% opacity for the blast and agglomerating furnace. [Rule 62-296.603(1)(a), F.A.C.]
 - B) 0.002 gr/dscf and 3% opacity at the exit of the baghouse for blast furnace charging. [Rule 62-296.603(1)(b), F.A.C.]
 - 1) 3% opacity from the closed charge doors on the blast furnace during furnace operation.
 - 2) 6% opacity from the charge doors on the blast furnace during charging operations.

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certification No.: AC29-258634
Project: Secondary Lead Smelting
Facility

SPECIFIC CONDITIONS: (continued)

- C) 0.002 gr/dscf and 3% opacity for slag and product tapping for the blast and agglomerating furnaces at the exit of the baghouse. [Rule 62-296.603(1)(c), F.A.C.]
- D) 1.810 lbs./hr. and 5% opacity for the blast and agglomerating furnace. [40 CFR 52.535(c)(1)(i) and (iv)]
- E) 0.060 lbs./hr. and 5% opacity for slag and product tapping from the blast and agglomerating furnaces. [40 CFR 52.535(c)(1)(i) and (iv)]
- F) 0.220 lbs./hr. and 5% opacity for blast furnace charging at the exit of the baghouse. [40 CFR 52.535(c)(1)(i), (ii), and (iii)]
 - 1) 5% opacity from closed charge doors during furnace operation.
 - 2) 10% opacity from charge doors during charging operations.

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

- A) 50 mg/dscm (0.022 gr/dscf) and 20% opacity for the blast furnace. [40 CFR 60.122(a) and Rule 62-296.800, F.A.C.]
- B) 0.03 gr/dscf, 5.2 lb/hr, and 20.4 tons per any 12 consecutive month period for blast furnace.
- C) 0.03 gr/dscf, 0.79 lb/hr, and 3.1 tons per any 12 consecutive month period for the furnace tapping operations. [Rule 62.296.700, FAC]
- D) 0.03 gr/dscf, 2.14 lb/hr, and 8.35 tons per any 12 consecutive month period for the furnace charging operations. [Rule 62.296.700, FAC]

9. Blast furnace operations may be subject to additional pollutant emission and operational limitations pending issuance of permit pursuant to the facility's PSD application submitted reference DEP File No. 208018, PSD-FL-215.

Refining Operation (3 natural gas fired 52-ton refining kettles and associated pigging machines)

10. The permittee shall not allow lead emissions to exceed the following:

- A) 0.0002 gr/dscf and 3% opacity for the refining kettles. [Rule 62-296.603(1)(d), F.A.C.]
- B) 0.400 lbs./hr. and 5% opacity for three refining kettles. [40 CFR 52.535(c)(1)(i) and (ii)]

11. No more than two 52-ton refining kettles shall be operated at a time. [40 CFR 52-535(c)(1)(vi)]

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certification No.: AC29-258634
Project: Secondary Lead Smelting
Facility

SPECIFIC CONDITIONS: (continued)

12. The refining kettles shall be fired only with natural gas at a maximum heat input rate of 4.0 MMBTU/hr. per kettle. [AC29-184883]

13. The permittee shall not allow particulate matter emissions from the lead refining area baghouse to exceed 0.03 gr/dscf, 4.04 pounds/hr. and 12.12 tons per year. [Rule 62-296.700, F.A.C. and AC29-184883]

14. Maximum production from the refining kettles shall not exceed 30,000 tons/yr. of finished lead. [AC29-184883]

15. 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) consecutive month period. [AC29-184883]

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

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

- A) 3% opacity for the battery cracking operations.
- B) 0.0000333 gr/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.

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

18. 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. [AC29-217704]

Facility

19. Process rates for each specified operation shall not exceed the following: [Construction Permit AC29-217704, AC29-184883 and Construction Application dated 09/30/94]

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certification No.: AC29-258634
Project: Secondary Lead Smelting
Facility

SPECIFIC CONDITIONS: (continued)

<u>Source</u>	<u>Process Rate</u>
Blast Furnace	4.55 tons charged/hour*
Refining Kettles	52 tons of lead charged per batch per kettle
Slag Processing	6 tons of slag processed/hr.

* 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.

Testing Methods and Procedures

20. Test the emissions for the following pollutant(s) within 150 days of receipt of this permit and submit 2 copies of test data to 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 40 CFR 60 and Rule 62-297, F.A.C.:

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

21. Compliance with the emission limitations of Specific Condition Nos. 7, 8, 10, and 16 shall be determined using EPA Methods 1, 2, 3, 4, 5, 9, and 12 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 62-297, F.A.C. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Rule 62-297, F.A.C. and 40 CFR 60, Appendix A. In the case of the Method 9, Section 2.5 shall be excluded, pursuant to 40 CFR 52.535(b)(5); Thus waiving the six minute averaging period and establishing an instantaneous standard as established in Specific Condition Nos. 7.D., 7.E., 7.F., 8.A., and 10.B.

22. 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) and Rule 62-297-345(1), (2), (3), F.A.C. Source 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.

23. Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 90-100% of rated capacity as specified in Specific Condition No. 19. If it is impracticable to test at capacity, then the source may be tested at less than capacity; in this case subsequent 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

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certification No.: AC29-258634
Project: Secondary Lead Smelting
Facility

SPECIFIC CONDITIONS: (continued)

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 and actual operating conditions may invalidate the test. [Rule 62-4.070(3), F.A.C.]

24. The permittee shall notify the Air Compliance Section of the Environmental Protection Commission of Hillsborough County at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the contact person who will be responsible for coordinating and having such test conducted. [Rules 62-297.340(1)(i) and 62-209.500, F.A.C.]

25. Visible emissions test must be conducted in accordance with the following requirements:

- 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. [Permit No. AC29-184883]
- 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.

26. 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, 62-272, 62-273, 62-275, 62-296, or 62-297, F.A.C., or in a permit issued pursuant to those rules is being violated,

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certification No.: AC29-258634
Project: Secondary Lead Smelting
Facility

SPECIFIC CONDITIONS: (continued)

it may require the owner or operator 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 Recordkeeping

27. The permittee shall minimize emissions at all times, including periods of startup, shut down, and malfunction in a manner consistent with good air pollution control practice. [40 CFR 60.11(d) and Rule 62-4.070(3), F.A.C.]

28. The permittee shall petition to revise this permit if affected, within 90 days of any revision to the lead SIP as detailed in 40 CFR 52.535.

29. The permittee shall maintain records of all process control operating parameters and process upsets. They shall include nature and duration of upsets and emission control equipment malfunction, a detailed description of the nature and duration of the upset or malfunction, the expected effects on emissions and corrective actions taken or planned to avoid recurrences. Such records shall be available at the plant site for inspections by the Region IV Administrator of EPA or its authorized agent for a period of at least two years. [40 CFR 52.535 and 40 CFR 60.7(b)]

30. The permittee shall maintain continuous records of plant process and emission control operations as necessary to determine continuous compliance. Such records shall include reports of all process operations and control equipment operating parameters. Such records shall also include reports of all types of process upsets and emission control equipment malfunctions detailing the nature and duration of the upset or malfunction, the expected effects on emissions, and the corrective actions taken or planned to avoid recurrences. Such records shall be available at the plant site for inspection for a period of at least two (2) years. [40 CFR 52.535(b)(4)]

31. 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 is employed to control such lead emissions. RACT measures shall include but not be limited to the following: [Rule 62-296.601(2), F.A.C. and Construction Application dated September 30, 1994]

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certification No.: AC29-258634
Project: Secondary Lead Smelting
Facility

SPECIFIC CONDITIONS: (continued)

- A) All control measures listed in Specific Condition No. 39 of this permit.
- B) Modify the lead well tapping load doors and the duct connection to decrease the introduction of tramp air.
- C) Install a strip curtain inside of the charging door enclosure to reduce the area to be evacuated and partially seal off the large opening of the enclosure where the skip hoist enters.
- D) Maintain blast gate style dampers so that it will be possible to balance the air flow and maximum capture at pickup point for furnace operations.
- E) Install and 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.
- F) Maintain water application system to control fugitive plant emissions for the slag processing operation, battery breaking operation, raw material storage, dross wetting, sprinklers along the south boundary, and remaining sprinkler systems on facility grounds.
- G) 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.
- H) Maintain vegetation coverage on at least 10% of the structureless area of plant grounds.
- I) Twice daily during plant operation vacuum paved areas using a HEPA filter equipped vacuum.
- J) Install tire wash for frontend loader at the entrance of the group pile storage building to prevent tracking of lead bearing materials outside the area.
- K) Close and vegetate old stormwater pond until final use of the area is determined.*
- L) Eliminate slag transfer with frontend loader through the plant. Slag will be stored, handled, and processed in enclosed structures.
- M) Use only trained personnel for furnace operations.

* Completion pending DEP approval.

32. To show compliance with Specific Condition No. 18, no less than once per month the permittee shall test the slag for lead content prior to undergoing the slag processing. Lab results shall be maintained for the most recent two year period. The records shall be made available to the Environmental Protection Commission of Hillsborough County, state, or federal air pollution agency upon request. [Rule 62-4.070(3), F.A.C.]

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certification No.: AC29-258634
Project: Secondary Lead Smelting
Facility

SPECIFIC CONDITIONS: (continued)

33. In order to document compliance with the tons per year limitations of Specific Condition No. 19, lead and particulate matter emissions shall be calculated using the methodology outlined in construction permit AC29-217704. A table summarizing the method is included as Attachment A. [Rule 62-4.070(3), F.A.C.]

34. The permittee shall maintain daily records on the number of charges to the blast furnace and the make-up of each charge (i.e., groups, coke, limerock, etc.) to show compliance with Specific Condition No. 19. The permittee shall also maintain monthly inventory records showing types and quantities of materials charged to the furnace during the month. [Rule 62-4.070(3), F.A.C.]

35. The permittee shall adhere to the Operation and Maintenance Plan as specified in Attachment B of this permit for the control of particulate matter and lead emissions. The Operation and Maintenance Plan in Attachment A is an enforceable component of this permit. [Rule 62-296.700, F.A.C. and Rule 62-296.600(4), F.A.C.]

36. The permittee shall keep the following records for a minimum of two years and make them available to any representative of the Department or the Environmental Protection Commission of Hillsborough County on request: [Rule 62-296.600(5), F.A.C. and 40 CFR 60.7(d)]

- A) Records of control equipment operating parameters are detailed in the Operation and Maintenance Plan in Attachment A of this permit and monitoring device calibration checks.
- B) Maintenance records on the control equipment, including black light tests, bag replacements, structural repairs, motor replacements and any adjustments that are made to monitoring devices.
- C) Records of control system and malfunctions or failures and corrective actions taken.

37. In order to document compliance with Specific Condition Nos. 4, 5, and 14, the permittee shall maintain a record processing operating hours (hours/day), amount of slag processed (tons/day), and refining kettles production. These records shall be summarized on a monthly basis showing total hours and tons for the month for the last twelve consecutive month period. These records shall be recorded in a permanent form suitable for inspection by the Department upon request, and shall be retained for at least a two year period. [AC29-217704 and Rule 62-4.070(3), F.A.C.]

38. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Rule 62-296.310, F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alterations,

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certification No.: AC29-258634
Project: Secondary Lead Smelting
Facility

SPECIFIC CONDITIONS: (continued)

demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. Reasonable precautions shall include, but not be limited to, the following:

- A) Personnel shall ensure that all doors in the slag fixation building are closed prior to operate the slag processing equipment and kept closed during operation.
- B) Personnel shall ensure that the water spray system for the receiving hopper, conveyors, kinetic crusher, vibrating sizing screen, and mixing operations are on and operating prior to operating the slag process equipment.
- C) Slag stored in the bin located in the slag fixation building shall be wetted while loading into the receiving hopper.
- D) Personnel shall ensure the collection hoods on the kinetic crusher is on and operating prior to beginning the slag processing.
- E) Supervisory inspections shall routinely be conducted during slag processing operations to ensure all of the above stated precautions are taken to reduce fugitive generation.

39. Pursuant to 40 CFR 52.535(b)(2), non-process fugitive emissions (road dust, stockpiles, plant grounds, etc.) shall be minimized. Minimization efforts shall include such fugitive dust suppression activities as chemical stabilization, water spraying with appropriate runoff collection, resurfacing, vacuuming, revegetation, and other EPA approved methods.

40. 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(39), 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 listed on page 1 of this permit.
- B) Installation or addition of any equipment which is a source of air pollution.

41. The permittee shall install, 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 33. [Rule 62-4.070(3), F.A.C.]

42. The permittee shall propose methods to accurately monitor (within 10 percent) the maximum permitted rates stated in Specific Condition No. 19 and submit the same with the application to operate. [Rule 62-4.070(3), F.A.C.]

PERMITTEE:
Gulf Coast Recycling, Inc.

Permit/Certification No.: AC29-258634
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Facility

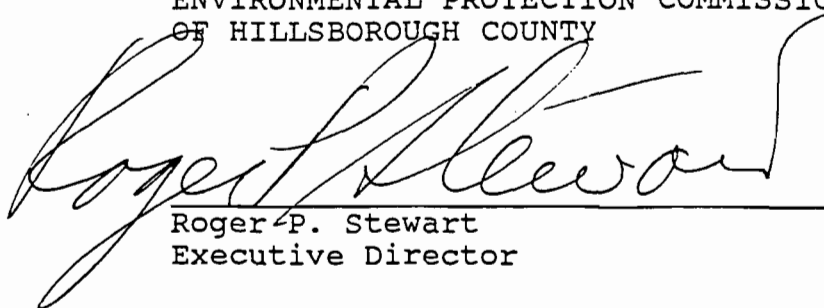
SPECIFIC CONDITIONS: (continued)

43. The permittee shall install, 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.]

44. 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(2), F.A.C.]

45. Submit a completed Title V operating permit application (DEP Form No. 62-210.900(1)) in quadruplicate to the Environmental Protection Commission of Hillsborough County on or before November 15, 1995 or as specified by rule, along with compliance test results, certification that requirements of Specific Condition Nos. 32, 41 & 42 have been met, and an Operation and Maintenance Plan meeting the requirements of 62-296.700(6), F.A.C. for the furnace operation, tapping operation, and charging operation.

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY



Roger P. Stewart
Executive Director

COMMISSION

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

EXECUTIVE DIRECTOR

ROGER P. STEWART



8-1-95
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

August 1, 1995
CERTIFIED MAIL # Z 286 203 801

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

CASE # 95-0728SKW057

NOTICE OF INTENT TO INITIATE ENFORCEMENT

Dear Mr. Kitchen,

SUBJECT: Facility located at 1901 North 66th Street, Tampa
(S14 T29 R19)

The Environmental Protection Act of Hillsborough County, Chapter 84-446, Laws of Florida (Act), and Chapter 403, Florida Statutes, authorize and empower the Environmental Protection Commission of Hillsborough County (Commission) to enforce rules and regulations to protect, control, abate, and prohibit pollution in Hillsborough County. In this regard, you are hereby informed of the following:

1. Air monitoring data collected at a monitor located immediately north of the Gulf Coast Recycling, Inc. (GCR) facility indicates that the National Ambient Air Quality Standard for lead of 1.5 micrograms per cubic meter was exceeded during the first two calendar quarters of 1995. The quarterly averages were 4.5 and 2.2 micrograms per cubic meter, respectively. Commission staff believes that GCR's lead acid battery recycling operation is the primary source of ambient lead detected 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.

2. Results of an annual compliance test conducted by GCR on November 1-3, 1994, and received by Commission staff on December 13, 1994, reveal that GCR exceeded the maximum permitted process input rate during operation of the blast furnace. The actual process input rate during testing was between 6.14 and 6.56 tons per hour. Specific Condition No.

Willis M. Kitchen
August 1, 1995
Page 2 of 3

15 of Permit No. A029-173310 (Permit) prohibits a raw material charging rate in excess of 4.58 tons per hour.

3. Specific Condition No. 19 of the Permit requires that GCR maintain daily and monthly records of raw material input to the blast furnace consistent with the requirements of Specific Condition No. 15. Based on its review of GCR's records, Commission staff believes that GCR's current record keeping format does not adequately fulfill the requirements of the Permit.

4. From February 4, 1994 to the present, Commission staff has received complaints from citizens living or working in areas adjacent to the GCR facility, alleging a nuisance caused by objectionable odors from the facility. On June 21, 1995 and on or about June 28, 1995, Commission staff detected objectionable odors while inspecting areas adjacent to the GCR facility. Based on wind direction and inspection 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. Section 16 of the Act prohibits any emission that causes or reasonably may be expected to cause a nuisance.

5. In response to the high ambient air lead recordings, Commission staff took numerous soil samples in the vicinity of the GCR facility. Several samples exceeded three times the average background lead concentration and may indicate a significant release as defined by EPA. A number of the samples also exceeded the Florida Department of Environmental Protection's soil cleanup goals for residential and industrial land uses.

You are here advised the Commission staff believes that the above facts demonstrate violations of the Act and the Florida Administrative Code, and we are therefore obligated to pursue enforcement for correction.

Show cause: Should you believe that the above information is incorrect or incomplete, you are requested to immediately show cause by providing us with any additional relevant information that may indicate that the above is not a violation.

In addition to correction, potential penalties for such violations include imposition of damages and civil penalties of up to \$10,000 per violation. Each day in which the above violations continue or recur constitutes a separate violation subject to enforcement.


Willis M. Kitchen
August 1, 1995
Page 3 of 3

Settlement without litigation: Should you wish to settle this matter amicably, the Executive Director may be able to enter into a Consent Order containing mutually agreeable terms. Such an order normally contains conditions necessary to correct the violation, reimbursement of costs, and a settlement to the Pollution Recovery Fund. In return, the Executive Director will waive the right to proceed in court against you.

In the hope that an amicable resolution of this matter can be reached, we request that you respond in writing within 10 days of receipt of this Notice to explain the cause(s) of the above circumstances. Please include the steps you have taken or propose to take to prevent a recurrence so that we can better determine what corrections need to be undertaken. If you would like to meet with staff to discuss any issue or the requirements for settlement, please contact Kay Strother at 272-5530.

Please mail or deliver your response or any questions you have to the Air Management Division, 1410 North 21st Street, Tampa, Florida 33605, to the attention of Kay Strother. We anticipate that this matter can be resolved through settlement and appreciate your cooperation in addressing this expeditiously.

Sincerely,



Iwan Choronenko
Director
Air Management Division

cc: Sara M. Fotopulos, Chief Counsel
Bill Thomas, DEP-SW
William B. Taylor, IV
Joyce Morales-Caramella, Gulf Coast Recycling, Inc.
Sheila Luce, Waste Management Division, EPC

LEAD-RACT

TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION
FOR
Gulf Coast Recycling, Inc.
Hillsborough County
Construction Permit
Application Number
AC29-258634

Environmental Protection Commission of
Hillsborough County
Tampa, FL
April 21, 1995

I. Project Description

A. Applicant:

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

Mr. Willis M. Kitchen
President

B. Engineer:

John B. Koogler, Ph.D., P.E.
P.E. No.: 12925
Koogler & Associates Environmental Services
4014 N.W. 13th Street
Gainesville, FL 32609

C. Project and Location:

The applicant submitted an application to address the Lead RACT provisions pursuant to Rule 62-296.600, F.A.C. The operation has been assigned NEDS Source Classification Code Nos. as shown in the table below and Standard Industrial Classification Code 3341 (Secondary Smelting/Refining Nonferrous Metals).

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

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

D. Process and Controls:

The facility recycles spent automotive and industrial lead-acid batteries to produce lead ingots. Batteries arrive at the facility by truck and are off-loaded directly to the battery cutting process area. The batteries are then cut open and the acid separated in a setting tank. A tumbler separates the lead battery groups from the casings. The casings are reduced by a hammermill and then are sent into a floatation and separation device. Separated plastics are blown into trucks and battery posts are routed directly to the refining operation. Lead bearing muds and rubber from the separation/flotation process are sent to the blast furnace along with sludge from the acid setting tank.

Battery groups are stored in piles in a partially enclosed structure. Battery groups for the blast furnace charge are taken from the older piles. One 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 charge 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 50-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 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 modelled 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 compartment shake type baghouse fabricated by GCR and also modelled after the Wheelabrator-Frye Dustube Model 126 baghouse. Particulate matter and lead emissions from the blast and agglomerating furnace tapping operations are captured by a hood and vented to a 7,000 ACFM one compartment shaker baghouse similar in design to the previously mentioned baghouse. Particulate matter and lead emissions from the refining kettles are controlled by a 17,000 ACFM two compartment shaker baghouse. Emissions from the slag processing are controlled with the use of a 3,500 ACFM shaker type baghouse. Fugitive emissions of particulate matter and lead from process and grounds are controlled through the use of water spray, reasonable precautions, and specific work practices. Flue gas emissions from the furnace operations containing NO_x, CO, SO₂, and VOC are uncontrolled.

E. Application Information:

Received on: September 30, 1994

Information Requested: October 28, 1994 and December 29, 1994

Application Complete: January 23, 1995

II. Rule Applicability

This project is subject to the preconstruction review requirements of Chapter 403, Florida Statutes, Chapters 62-209, 62-210, 62-212, 62-272, 62-275, 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 modification under the requirements of this rule.

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 of 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 62-296.310, General Particulate Emission Limiting Standards, F.A.C., since the facility's 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, General Pollutant Emission Limiting Standards, F.A.C., since the facility's operations could potentially contribute to an 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 nonattainment 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 62-296.800, 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.

This project is not subject to the requirements of Rule 62-296.810, National Emission Standard for Hazardous Air Pollutants, F.A.C., since there is not currently a source category for secondary lead smelters.

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 (see Table A)

Inventory of Title III pollutants is estimated to be more than 25 TPY (> 31.8 TPY) collectively. 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, 62-272, 62-275, 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, 62-272, 62-275, 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).

Table A

Estimated Actuals

	PM			Opacity	Pb			NO _x		VOC		CO		SO ₂	
	gr/dscf	lb/hr	TPY		gr/dscf	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
<u>Furnace Operations</u>															
Blast and Agglomerating Furnace	---	.321	1.01	0	---	.15	.046	1.98	6.27	33.10	105	683.32	2165.4	377.6	1230.8
Tapping Operations	---	.023	.074	0	---	.00025	.00079								
Charging Operations		.016	.051	0											
<u>Refining Operations</u>															
(3) Refining Kettles		.232	.67	0		.001	.003	---	---	---	---	---	---	---	---
Natural Gas Heaters	---	---	---	---	---	---	---	---	1.837	---	.097	---	.367	---	.011
<u>Miscellaneous</u>															
Slag Processing	---	.0066	.004		---	.00046	.00029								
Facility Grounds and Miscellaneous Operations	---	---	---		---	.095	0.42								
TOTALS	---	---	1.81		---	---	.47		8.11	---	105.1	---	2165.8	---	1230.8

Allowables

	PM			Opacity	Pb			NO _x *		VOC*		CO*		SO ₂ *	
	gr/dscf	lb/hr	TPY		gr/dscf	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
<u>Furnace Operations</u>															
Blast and Agglomerating Furnaces	.03	5.24	20.43	3%	0.01		6.8							384.2	1498.4
Tapping	.03	.79	3.1	3%	.002		0.2								
Charging	.03	2.14	8.35	3%	.002		0.56								
<u>Refining Operations</u>															
(3) Refining Kettles	.03	4.04	12.12	3%	.0002		0.08								
Natural Gas Heaters	---	---	---		---	---	---	---	---	---	---	---	---	---	---
<u>Miscellaneous</u>															
Slag Processing	---	---	< 1	3%	.000033		.00079								
Facility Grounds and Miscellaneous Operations	---	---	---	3%	---	---	---	---	---	---	---	---	---	---	1498.4
TOTALS			45.0		---	---	7.6								

* These pollutants are being addressed in pending PSD application (DEP File No. 209018, PSD-FL-215).



GULF COAST RECYCLING, INC.

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

May 5, 1995

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

RECEIVED
MAY 11 1995
Bureau of
Air Regulation

RE: AC29-209018, PSD-FL-215

Dear Mr. Fancy:

This letter is in response to your last correspondence concerning additional information needed to process Gulf Coast Recycling's ("GCR") pending PSD application. Please accept the company's apology for delaying the response, however, the decision on how to control sulfur dioxide emissions is a difficult one and it has been further complicated by EPA's indecision concerning whether or not to regulate HCl emissions from secondary lead smelters.

As indicated in the PSD application, it was determined that traditional end-of-pipe controls, such as scrubbers, are not economically feasible for the facility, however, the promulgation of the MACT standards, as originally proposed, would necessitate installation of a scrubber. Final MACT standards for the secondary lead industry will be promulgated shortly, at which time, the industry will know whether or not HCl will be regulated and hence whether or not scrubbers will be an absolute requirement.

GCR in the mean time has been investigating technologies which might be potentially available to enable the company to reduce sulfur dioxide emissions by reducing sulfur in the raw materials. The investigation was instigated by comments received from the various agencies reviewing the PSD application, review of upcoming regulations, including the federal Title V program, proposed elimination of HCl from the MACT standards for the secondary lead industry, and projected production needs. GCR believes that it is in its best interest, and that of the environment, to investigate the potential reductions offered by these technologies rather than focusing on the proposed 374 lbs/hour emission rate in the PSD application.

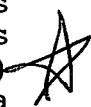
Numerous technologies, both proven and emerging, have been evaluated. Front-end desulfurization in conjunction with an

Mr. C. H. Fancy
May 5, 1995
Page Two

European lead recovery process is one of the technologies under consideration. If applicable to the operations at GCR, said process will enable the company to substantially reduce sulfur dioxide emissions while remaining economically competitive.

GCR has been working closely with the European manufacturer's U.S. partner to apply the technology to our facility. One meeting and site visit took place and a second meeting will be scheduled upon receipt of the manufacturer's proposal. The technology being considered is just now beginning to make its way into the United States in related industries. Because it is an emerging technology, it is taking time to fully evaluate its effectiveness for our use.

Also being investigated by consultants for GCR, is the potential to create a sodium sulfate slag by the addition of certain chemicals to the blast furnace operations. Apparently a similar chemical addition has been shown to reduce sulfur dioxide emissions from rotary furnaces.

Gulf Coast Recycling, Inc. is committed to doing its part to improve the air quality in the Tampa area. As such, the company is diligently striving to select a "control" technology as soon as practicable. GCR respectfully requests an additional ninety (90) days in which to submit its choice of control equipment and a schedule for implementation. 

Thank you for your patience and understanding in this very important issue. If you have any questions feel free to contact me at 813/626-6151.

Sincerely,

GULF COAST RECYCLING, INC.

Willis M. Kitchen

Willis M. Kitchen
President

*cc: J. Kissel, SWD
L. DeKen, EPC HC
EPA
NPS
D. Beason, OGC*

(e) This amendment (39-9284) becomes effective on July 28, 1995. Issued in Kansas City, Missouri, on June 13, 1995.

Henry A. Armstrong,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 95-14870 Filed 6-22-95; 8:45 am]

BILLING CODE 4910-13-U

NATIONAL LABOR RELATIONS BOARD

29 CFR Parts 100 and 102

Miscellaneous Amendments

AGENCY: National Labor Relations Board (NLRB).

ACTION: Miscellaneous amendment rule.

SUMMARY: The National Labor Relations Board is issuing a miscellaneous amendments rule to its administrative regulations to update cross-references and to change the NLRB's headquarters address.

EFFECTIVE DATE: The miscellaneous amendments are effective June 23, 1995.

FOR FURTHER INFORMATION CONTACT:

Gloria Joseph, Director of Administration, National Labor Relations Board, Room 7108, 1099 14th Street NW, Washington, DC 20570-0001. (202-273-3890).

SUPPLEMENTARY INFORMATION: On July 21, 1994, the National Labor Relations Board amended its administrative regulations (59 FR 37157) governing the standards of conduct and financial disclosure requirements of its employees of the Agency. Most of those regulations had been superseded by the Standards of Ethical Conduct for Employees of the Executive Branch issued by the Office of Government (OGE). The NLRB published the rule to repeal those portions of the provisions that were superseded by the executive branch-wide standards and to update cross-references in the current regulations that continued to be applicable. Again, on May 5, 1995, the NLRB published a rule to correct amendatory instructions 4, and 5, and amendatory instruction 10. (59 FR 37158) of the July 21, 1994 amending rule (60 FR 22269). This miscellaneous amendments rule is being published to update cross-references, and change the NLRB's headquarters address in some sections from its former address of 1717 Pennsylvania Avenue NW to its current address of 1099 14th Street NW.

List of Subjects in 29 CFR Parts 100 and 102

Administrative practice and procedure; Civil rights; Claims; Equal

employment opportunity; Individuals with disabilities.

Parts 100 and 102 of Title 29 CFR are amended as follows:

PART 100—ADMINISTRATIVE REGULATIONS

1. The authority citation for part 100 is revised to read as follows:

Authority: Sec. 6, National Labor Relations Act, as amended (29 U.S.C. 141, 146).

Subpart A is also issued under 5 U.S.C. 7301; 5 U.S.C. app. (Ethics in Government Act of 1978); E.O. 12674, 3 CFR 1989 Comp., 215, as modified by E.O. 12731, 3 CFR 1990 Comp., p. 306; 5 CFR 2635.105, 2635.403, 2635.802(a), 2635.803; 18 U.S.C. 201 et seq.; 18 U.S.C. 208; 57 FR 56433 (codified at 5 CFR 735).

Subpart B is also issued under the Inspector General Act of 1978, as amended by the Inspector General Act Amendment of 1988, 5 U.S.C. app. 3; 18 U.S.C. 201 et seq.; 5 CFR 735; 42 U.S.C. 2000e-16(a); 29 CFR 1613.2049a) and 29 CFR 1613.216.

Subpart D is also issued under 28 U.S.C. 2672; 28 CFR part 14.

Subpart E is also issued under 29 U.S.C. 794.

§ 100.502 [Amended]

2. In § 100.502, reference "(§§ 100.601-100.670)" is revised to read "(§§ 100.501-100.570)".

§ 100.503 [Amended]

3. In § 100.503, in the definition of "qualified individual with handicaps", in paragraph (4), the reference "§ 100.640" is revised to read "§ 100.540".

§ 100.549 [Amended]

4. In § 100.549, reference "§ 100.150" is revised to read "§ 100.550".

§ 100.550 [Amended]

5. In § 100.550(a)(3) and (b)(2), reference "§ 100.650(a)" is revised to read "§ 100.550(a)".

§ 100.560 [Amended]

6. In § 100.560(d) reference "§ 100.160" is revised to read "§ 100.560".

PART 102—RULES AND REGULATIONS, SERIES 8

1. The authority citation for Part 102 continues to read as follows:

Authority: Sec. 6, National Labor Relations Act, as amended (29 U.S.C. 151, 156). Section 102.117 also issued under sec. 552(a)(4)(A) of the Freedom of Information Act, as amended (5 U.S.C. 552(a)(4)(A)), and section 552a(j) and (k) of the Privacy Act (5 U.S.C. 552a(j) and (k)). Sections 102.143 through 102.155 also issued under sec. 504(c)(1) of the Equal Access to Justice Act as amended (5 U.S.C. 504(c)(1)).

§ 102.117 [Amended]

2. In § 102.117(f), (g), and (i) the address "1717 Pennsylvania Avenue NW., Washington, DC 20570" is revised to read "1099 14th Street NW., Washington, DC 20570".

3. In § 102.117, paragraph (c)(2)(iii)(a), (b), and (c) is renumbered as paragraph (c)(2)(iii)(A), (B), and (C).

By direction of the Board.

National Labor Relations Board.

John J. Tener,

Acting Executive Secretary.

[FR Doc. 95-15352 Filed 6-22-95; 8:45 am]

BILLING CODE 7545-01-M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 9 and 63

[AD-FRL-5217-2]

RIN 2060-AE04

National Emission Standards for Hazardous Air Pollutants From Secondary Lead Smelting

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action promulgates national emission standards for hazardous air pollutants (NESHAP) for new and existing secondary lead smelters pursuant to section 112 of the Clean Air Act (the Act) as amended in 1990. Secondary lead smelters have been identified by the EPA as significant emitters of several chemicals identified in the Act as hazardous air pollutants (HAP's) including but not limited to lead compounds, arsenic compounds, and 1,3-butadiene. Chronic exposure to arsenic and 1,3-butadiene is associated with skin, bladder, liver and lung cancer and other developmental and reproductive effects. Exposure to lead compounds results in adverse effects on the blood, central nervous system and kidneys. Children are particularly sensitive and exposure to lead compounds can also result in reduced cognitive development and reduced growth. This rulemaking will affect secondary lead smelters that use blast, reverberatory, rotary, or electric smelting furnaces to recover lead metal from scrap lead, primarily from used lead-acid automotive-type batteries. The purpose of the final rule is to reduce HAP emissions from secondary lead smelting. This rule is estimated to reduce emissions, including metal HAP's and organic HAP's, by about 1,300 megagrams (1,400 tons) per year.

The NESHAP provides protection to the public by requiring all secondary lead smelters to meet emission standards reflecting the application of the maximum achievable control technology (MACT). The NESHAP regulates emissions of lead compounds and total hydrocarbons (THC's) as surrogates for metal HAP's and organic HAP's, respectively. The EPA is also adding secondary lead smelters that are area sources to the list of source categories that are subject to MACT standards.

EFFECTIVE DATE: June 23, 1995.

ADDRESSES: *Docket.* Docket No. A-92-43, containing information considered by the EPA in development of the promulgated standards, is available for public inspection and copying between 8:00 a.m. and 5:30 p.m., Monday through Friday except for Federal holidays, at the following address: U.S. Environmental Protection Agency, Air and Radiation Docket and Information Center (MC-6102), 401 M Street, SW, Washington, DC 20460; telephone (202) 260-7548. The docket is located at the above address in Room M-1500, Waterside Mall (ground floor). A reasonable fee may be charged for copying.

Background Information Document. A background information document (BID) for the promulgated standards may be obtained from the docket; the U.S. EPA Library (MD-35), Research Triangle Park, North Carolina 27711, telephone (919) 541-2777; or from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161, telephone (703) 487-4650. Please refer to "Secondary Lead Smelting—Background Information for Promulgated Standards," (EPA-453/R-95-008b).

The BID contains a summary of all the public comments made on the proposed standards and the EPA's response to the comments. It also contains a summary of the changes made to the standards since proposal.

FOR FURTHER INFORMATION CONTACT: Mr. Phil Mulrine, Metals Group, Emission Standards Division (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711; telephone (919) 541-5289.

SUPPLEMENTARY INFORMATION:

Judicial Review. Under section 307(b)(1) of the Act, judicial review of a NESHAP is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit within 60 days of today's publication of this final rule. Under section 307(b)(2) of the Act, the

requirements that are the subject of today's notice may not be challenged later in civil or criminal proceedings brought by the EPA to enforce these requirements.

The information presented in this preamble is organized as follows:

- I. Background
- II. Summary
 - A. Summary of Promulgated Standards
 - B. Summary of Major Changes Since Proposal
 - C. Summary of Environmental, Energy, Cost, and Economic Impacts
- III. Public Participation
- IV. Significant Public Comments and Responses
 - A. Adverse Health Effects Finding for Area Sources
 - B. Hydrogen Chloride/Chlorine Emission Standards
 - C. Metal Hazardous Air Pollutant Monitoring Requirements
 - D. Exemption from Resource Conservation and Recovery Act Boiler and Industrial Furnace Emission Standards
- V. Administrative Requirements
 - A. Docket
 - B. Executive Order 12866
 - C. Unfunded Mandates Act
 - D. Paperwork Reduction Act
 - E. Regulatory Flexibility Act

I. Background

On July 16, 1992 (57 FR 31576), the EPA published a list of major and area sources for which NESHAP are to be promulgated. On December 3, 1993 (58 FR 63941), the EPA published a schedule for promulgation of those standards. The secondary lead smelting source category is included on the list of major sources and the EPA is required to establish national emission standards by May 31, 1995 according to this schedule. Major sources are those sources emitting 10 or more tons per year of any one HAP or 25 or more tons per year of a combination of HAP's.

This NESHAP was proposed in the *Federal Register* on June 9, 1994 (59 FR 29750). The same notice also announced that the EPA was proposing to add secondary lead smelters that are area sources to the list of source categories that will be subject to national emission standards. Area sources are those smelters emitting less than 10 tons per year of any single HAP and less than 25 tons per year of a combination of HAP's. The EPA received 31 letters commenting on the proposed rule and proposed area source listing. The EPA received no requests for a public hearing. The EPA published a supplemental notice announcing the availability of new data regarding the proposed standards for hydrogen chloride/chlorine (HCl/Cl₂) emissions on April 19, 1995 (60 FR 19556). The

EPA received eight comment letters in response to the supplemental notice.

II. Summary

A. Summary of Promulgated Standards

The promulgated rule establishes standards to limit HAP emissions from smelting furnaces, refining kettles, agglomerating furnaces, dryers, and fugitive dust sources at both major source and area source secondary lead smelters. The promulgated rule does not apply to primary lead smelters, lead refiners, or lead remelters.

Emission standards promulgated under section 112 are to be technology-based and are to reflect the maximum degree of reduction of HAP emissions achievable taking into consideration the cost of achieving the emission reduction, any nonair quality health and environmental impacts and energy requirements. These standards are termed MACT standards. Emission reduction may be accomplished through application of a variety of measures, methods, or techniques. Emission standards, however, can be no less stringent than a minimum baseline or "floor" for standards set out in the statute.

For new sources, the standards for a source category or subcategory cannot be less stringent than the emission control that is achieved in practice by the best controlled similar source. The standards for existing sources can be less stringent than standards for new sources, but they cannot be less stringent than the average emission limitation achieved by the best-performing 12 percent of existing sources (excluding certain sources described in section 112(d)(3) of the Act) for categories and subcategories with 30 or more sources, or the best-performing 5 sources for categories and subcategories with fewer than 30 sources. There are fewer than 30 secondary lead smelters, so the standards for existing sources are based on the best-performing 5 sources.

Floor levels of control were determined for each of the affected source types under consideration for regulation. Source types are process sources, process fugitive sources, and fugitive dust sources. For process fugitive sources and fugitive dust sources, which are similar in character and emissions potential across all secondary lead smelters, the entire population of secondary lead smelters are considered in determining MACT floor levels of control. For process sources, specifically smelting furnaces, smelters are differentiated and divided into configurations based on the

smelting furnace types used at individual smelters. In all but one case, floors for existing source MACT and new source MACT are identified. In the one case where existing source MACT is less stringent than new source MACT, the determination was made that the establishment of standards beyond the existing source floor was unreasonable. A complete discussion of the selection of the MACT and basis of standards for each source type is presented in the preamble to the proposed rule (59 FR 29760; June 9, 1994).

1. Process Emission Sources

Owners and operators of all smelting furnace types must limit lead compound emissions, which is a surrogate for all metal HAP's, to no more than 2.0 milligrams per dry standard cubic meter (mg/dscm; 0.00087 grains per dry standard cubic foot (gr/dscf)). Owners and operators must limit THC emissions, which is a surrogate for all organic HAP's, to varying levels depending on the smelting furnace type. No THC limits apply to reverberatory, rotary, and electric furnaces not collocated with blast furnaces.

Owners and operators of collocated reverberatory and blast furnaces must comply with a THC limit of 20 parts per million by volume (ppmv) as propane at 4 percent carbon dioxide (CO₂) when both furnaces are operating. Less stringent limits apply when the reverberatory furnace is not operating. When the reverberatory furnace is not operating, new blast furnaces collocated with reverberatory furnaces must comply with a THC limit of 70 ppmv, and existing blast furnaces must comply with a THC limit of 360 ppmv.

Owners and operators of new blast furnaces located at blast-furnace-only smelters must comply with a THC limit of 70 ppmv. Existing blast furnaces located at blast-furnace-only smelters must comply with a THC limit of 360 ppmv. The THC emissions from each blast furnace charging chute at all smelters with blast furnaces shall not exceed 0.20 kilograms per hour (kg/hr; 0.44 pounds per hour (lb/hr)).

Table 2 in the attached regulatory text summarizes the emission limits for smelting furnace process sources.

2. Process Fugitive Emission Sources

Owners and operators must comply with either of two process fugitive emission control options. Each process fugitive emission source must be controlled either by an enclosure-type hood that is ventilated to a control device or must be fully enclosed within a containment building (within the meaning of 40 CFR part 265, subpart

DD) that is ventilated to a control device. Lead compound emissions, as a surrogate for all metal HAP's, from each hood or building control device are limited to 2.0 mg/dscm (0.00087 gr/dscf).

Refining kettle enclosure hoods must have a minimum air velocity into all hood openings (i.e., face velocity) of 75 meters per minute (m/min; 250 feet per minute (fpm)), and the enclosure hoods over drying kiln transition pieces must have a minimum face velocity of 110 m/min (350 fpm). All other process fugitive emission sources (charging points, lead and slag taps, and agglomerating furnaces) with an enclosure hood must have a minimum face velocity of 90 m/min (300 fpm). If a ventilated building is used to control process fugitive sources, then it must have a minimum air velocity into the building through all openings of 75 m/min (250 fpm).

Table 3 in the attached regulatory text summarizes the requirements for process fugitive emission sources.

3. Fugitive Dust Sources

Fugitive dust emissions must be controlled by the measures specified in a standard operating procedures (SOP) manual. The SOP must be developed by the owner or operator of each smelter and submitted to the Administrator for approval. The SOP must describe the measures that will be used to control fugitive dust emissions from plant roadways; the battery breaking area; the furnace, refining, and casting areas; and the materials storage and handling areas. Acceptable control measures include either a total enclosure of the fugitive dust source and ventilation of the enclosure to a control device, or a combination of partial enclosures, wet suppression, and pavement cleaning. Lead compound emissions, as a surrogate for all metal HAP's, from enclosure control devices must be limited to 2.0 mg/dscm (0.00087 gr/dscf).

4. Compliance Dates

Compliance for existing sources must be achieved no later than June 23, 1997, or upon startup for new or reconstructed sources.

5. Compliance Test Methods

Compliance with the emission limits for lead compounds shall be determined according to EPA Reference Method 12 (40 CFR part 60, appendix A). Compliance with the THC emission limits shall be determined according to EPA Reference Method 25A (40 CFR part 60, appendix A). Concentrations of THC shall be reported in ppmv, as

propane, corrected to 4 percent CO₂ to correct for dilution. Sampling point locations shall be determined according to EPA Reference Method 1, and stack gas conditions shall be determined, as appropriate, according to EPA Reference Methods 2, 3, 3B, and 4 (40 CFR part 60, appendix A).

6. Monitoring Requirements

The rule requires an initial lead compound emission test to demonstrate compliance with the lead compound emission standards. All owners and operators must also prepare SOP manuals for the systematic inspection and maintenance of all baghouses. Each manual shall also include provisions for the diagnosis of problems and a corrective action plan. In addition, all baghouses are required to have bag leak detection systems with alarms to indicate bag leaks or other causes of increased emissions. Plans for corrective action must prescribe procedures to be followed whenever an alarm is triggered.

Compliance with the THC emission standards (except that for blast furnace charging) will require monitoring either afterburner or incinerator temperature or THC concentration. Only an initial compliance test is required for blast furnace charging.

7. Notification Requirements

The owner or operator will be required to comply with the notification requirements in the General Provisions to part 63 (40 CFR part 60, subpart A). In addition, owners and operators will be required to submit the fugitive dust control SOP and the baghouse SOP to the Administrator for review and approval.

8. Recordkeeping and Reporting Requirements

Owners and operators will be required to comply with the recordkeeping and reporting requirements in the General Provisions to part 63 (40 CFR part 63, subpart A). In addition, the owners and operators will be required to maintain records demonstrating that they have implemented the requirements of the fugitive dust control SOP and the baghouse SOP, including records of all bag leak detection system alarms and corrective actions.

B. Summary of Major Changes Made Since Proposal

Based on public comments received in response to both the initial notice of proposal and the supplemental notice, and other data received since proposal, the EPA has made several changes to the

Pb is surrogate for all metal HAPs

proposed rule. The BID referred to in the ADDRESSES section of this preamble contains a complete explanation of the EPA's reasons for making each of these changes. A summary of the major changes is presented below.

1. Applicability

The applicability of the rule was clarified by adding a statement that the rule does not apply to primary lead smelters, lead refiners, and lead remelters.

2. Standards for Process Sources

The THC emission limits for blast furnaces collocated with reverberatory furnaces were revised to account for periods when the reverberatory furnace is not operating.

When the reverberatory furnace is not operating, these blast furnaces will be allowed to meet the same THC limits as new and existing blast furnaces located at blast-furnace-only smelters (70 ppmv and 360 ppmv, respectively). The proposed standards required that reverberatory/blast furnace facilities meet a THC emission limit of 20 ppmv at all times. The proposed HCl/Cl₂ emission standards (and associated testing and monitoring requirements) are not being promulgated.

3. Standards for Process Fugitive Sources

The ventilation requirements for hoods have been modified; the volumetric flow rate requirement for refining kettle hoods has been withdrawn and the face velocity requirements for furnace charging and tapping have been lowered from 110 m/min (350 fpm) to 90 m/min (300 fpm). A provision has been added that will allow owners and operators to control process fugitive emission sources by enclosing them in a building that is ventilated to a control device, rather than having to comply with the enclosure hood and face velocity requirements at each emission source.

4. Test Methods and Schedule

The annual lead test has been withdrawn for all sources; only an initial lead test is now required. Velometers (anemometers) have been added as an alternate method for determining face velocities for process fugitive hoods and building doorways.

5. Monitoring Requirements

The proposed rule would have required a continuous opacity monitor (COM) and a site-specific opacity limit for monitoring lead compound emissions from process sources. These requirements have been withdrawn.

Rather than install and operate a COM, each owner or operator must now prepare a baghouse SOP manual that includes an inspection and maintenance procedure and a corrective action plan for all process, process fugitive, and fugitive dust baghouses. Each baghouse must also be fitted with a bag leak detection system with an alarm to monitor baghouse performance. An alarm signal by itself is not considered to be a violation of the lead compound emission limit. To maintain compliance, the owner or operator must follow the inspection and maintenance procedure and comply with the requirements of the corrective action plan whenever an alarm is activated.

There has been no change to the organic HAP monitoring requirements. The proposed HCl/Cl₂ monitoring requirements have been withdrawn.

6. Recordkeeping and Reporting Requirements

The recordkeeping and reporting requirements have been revised so they are consistent with the baghouse SOP manual in the revised monitoring requirements. Owners and operators also will be required to record the date and time of all bag leak detection system alarm signals, their cause, the corrective action taken, and the timing for such action.

The requirements for THC recordkeeping and reporting have been clarified so that only the 3-hour averages that are not in compliance with the allowable afterburner or incinerator temperature, or THC concentration must be reported, rather than all 3-hour averages for the entire reporting period. The recordkeeping and reporting requirements associated with the HCl/Cl₂ emission standards have been withdrawn. Finally, the reporting frequency has been changed to be consistent with the requirements under § 63.10 of the General Provisions.

C. Summary of Environmental, Health, Cost, and Economic Impacts

The final standards will reduce total nationwide emissions of both metal HAP's and organic HAP's from secondary lead smelters by 1,283 megagrams per year (Mg/yr) (1,411 tons/yr). These reductions include 53 Mg/yr (58 tons/yr) of metal HAP's and 1,230 Mg/yr (1,353 tons/yr) of organic HAP's. No reductions in HCl/Cl₂ emissions are expected as a direct consequence of the final rule because of the deletion of HCl/Cl₂ emission standards since proposal. However, emissions of HCl/Cl₂ are expected to be essentially eliminated in any case because of the elimination of polyvinyl chloride (PVC) plastic as a

separator material in batteries. The rationale for not promulgating HCl/Cl₂ emission standards is explained in section IV(B) of this preamble.

These emission reductions will have a positive effect on public health. Metal HAP emissions from secondary lead smelting include lead compounds and arsenic compounds, among others. Populations around secondary lead smelters can be exposed to metal HAP's through inhalation or through ingestion of metal HAP's that have settled on the soil in the vicinity of the smelter. Exposure to lead compounds occurs through inhalation or ingestion, but the effects are the same regardless of the route of exposure. Chronic exposure to lead compounds results in adverse effects on the blood, central nervous system, blood pressure, kidneys, and vitamin D metabolism. Children are particularly sensitive and exposure can also result in reduced cognitive development and reduced growth. Adverse effects on human reproduction have also been reported. Lead compounds can be persistent in the environment and have the potential to accumulate in food chains.

Chronic inhalation exposure to arsenic compounds is strongly associated with lung cancer and is associated with irritation of the skin and mucous membranes (dermatitis, conjunctivitis, pharyngitis, and rhinitis). Chronic oral exposure has resulted in gastrointestinal effects, anemia, peripheral nerve damage, skin lesions, and liver or kidney damage and is linked to skin, bladder, liver, and lung cancer.

Organic HAP emissions from secondary lead smelting include 1,3-butadiene, among other organic compounds. The effects of chronic exposure to 1,3-butadiene include increased cardiovascular disease. Animal studies of chronic exposure to 1,3-butadiene indicate effects on respiratory and cardiovascular systems and the liver, as well as developmental and reproductive effects. Animal studies have also reported tumors from inhalation exposure to 1,3-butadiene and the EPA has classified 1,3-butadiene as a probable human carcinogen.

In addition to the reductions in HAP air emissions achieved, the final standards will also achieve reductions in nationwide emissions of two criteria pollutants, carbon monoxide and particulate matter. Compliance with the final standards will reduce emissions of particulate matter by 135 Mg/yr (149 tons/yr) and those of carbon monoxide by 80,000 Mg/yr (88,000 tons/yr).

No significant adverse secondary air, water, or solid waste impacts are anticipated from these standards. The national annual energy usage due to the installation of the required control devices is expected to be 5.0 million cubic meters per year (180 million cubic feet per year) of natural gas to operate afterburners on blast furnaces and reverberatory/blast furnace smelters. The natural gas consumption estimated at proposal was 3.7 million cubic meters (130 million cubic feet per year). The increase since proposal is due to a revised analysis of the control equipment and amount of natural gas needed to perform gas stream blending to control organic HAP emissions from reverberatory/blast furnace smelters. No other notable energy impacts are expected.

The implementation of this regulation is expected to result in a national annual cost of \$2.8 million. This includes an annualized cost from installation of control devices of \$1.86 million and total monitoring, reporting, and recordkeeping costs of \$0.93 million. At proposal, the estimated national costs were \$2.6 million per year. The annualized control costs were estimated to be \$890,000 and the annual costs for monitoring, recordkeeping, and reporting were \$1.7 million. The annualized control costs have increased since proposal because the cost estimate to control organic HAP emissions from reverberatory/blast furnace smelters was revised in response to public comments. The annual monitoring, recordkeeping, and reporting costs have decreased since proposal because the HCl/Cl₂ monitoring requirements have been withdrawn and the final metal HAP monitoring requirements involve fewer emission tests and less expensive monitoring devices than at proposal.

The economic impact analysis done at proposal showed that the economic impacts from the proposed standard would be insignificant. The economic impact analysis was not revised for promulgation because the relatively small increase in costs is not expected to have any effect on the conclusions of the economic impact analysis.

III. Public Participation

On November 17, 1992, the EPA presented the National Air Pollution Control Techniques Advisory Committee with an overview of the EPA's decision to regulate surrogates in place of regulating individual metal HAP's and organic HAP's.

Prior to proposal of the standards, owners and operators of secondary lead smelters were invited by the EPA to participate in a meeting to discuss the

results of the EPA's secondary lead smelter testing program as well as the standards being evaluated for proposal. This meeting was held on October 5, 1993. The comments submitted following this meeting were incorporated into the proposed rule.

The standards were proposed and published in the Federal Register on June 9, 1994 (59 FR 29750). The preamble to the proposed standards discussed the availability of the BID, which described the technical basis and the impacts of the proposed standards. Public comments were solicited at the time of proposal.

To provide interested persons the opportunity for oral presentation of data, views, or arguments concerning the proposed standards, the opportunity for a public hearing was offered at proposal; however, no requests for a hearing were received. The public comment period was from June 9, 1994 to August 8, 1994. Thirty-one comment letters were received. A supplemental notice was published on April 19, 1995 (60 FR 19556) and eight comment letters were received. The comments were carefully considered by the Administrator in formulating the final rule.

IV. Significant Comments and Responses

The EPA received comment letters on the proposed standards from owners and operators of secondary lead smelters and industry trade associations, States, equipment vendors, and environmental groups. A detailed discussion of all the comments and the EPA's responses can be found in the promulgation BID, which is referenced in the ADDRESSES section of this preamble. The summary of comments and responses in the BID serves as the basis for the revisions that have been made to the standards between proposal and promulgation. Most of the comment letters contained multiple comments.

Significant comments and new information were received on four topics since proposal: the area source finding, the standards for process sources (especially those proposed for HCl/Cl₂ emissions), the monitoring requirements for metal HAP's, and the exemption from the Resource Conservation and Recovery Act (RCRA) boiler and industrial furnace (BIF) emission standards. These comments and the EPA's responses are summarized in this preamble.

A. Adverse Health Effects Finding for Area Sources

Six commenters agreed with the EPA's finding that smelters that are area

sources (i.e., those with emissions of less than 10 tons per year of any one HAP or 25 tons per year of a combination of HAP's) should be listed as sources subject to section 112 standards and should be subject to the same regulations as smelters that are major sources. Seven commenters disagreed with the EPA's decision to regulate area sources; three of the seven argued that the risks are insufficient to warrant regulation under MACT standards. After considering all comments on the subject, the EPA continues to believe that area sources should be regulated under MACT standards and is, therefore, maintaining its decision to regulate secondary lead smelters that are area sources under this final action.

The decision to list area source smelters to regulate them under the same standards as major source smelters is based on the cancer risks from secondary lead smelter emissions and noncancer health risks posed by lead compound emissions. The estimated annual cancer incidence is 0.1 cases for all seven smelters predicted to be area sources. This cancer incidence is due primarily to exposure to 1,3-butadiene and arsenic. The maximum exposed individual has a cancer risk of 1 in 1,000 and 560,000 individuals are estimated to be exposed to a risk greater than 1 in 1 million.

Section 112(c)(3) of the Act does not offer a "bright line" test for the EPA to use in making an area source finding. Instead, the EPA believes that it has discretion to consider a range of health effects endpoints and exposure criteria in making the requisite finding of a threat of adverse effects to health or the environment. In making area source listing determinations, the EPA strives to provide maximum feasible protection against risks to health from HAP's by: (1) Protecting the greatest number of persons possible to an individual lifetime cancer risk level of no higher than approximately 1 in 1 million and (2) limiting to no more than 1 in 10,000 the estimated cancer risk to the hypothetical maximum exposed individual. The estimated cancer risks presented by area source smelters are consistent with those supporting similar EPA decisions to regulate other categories of area sources and with the EPA's strategy to implement section 112 (57 FR 31576, July 16, 1992).

Exposure to lead compounds is also a concern. It is estimated that 250 individuals in the vicinity of area source smelters are exposed to ambient lead levels above the national ambient air quality standard (NAAQS) for lead of 1.5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$).

Emissions that result in ambient lead concentrations below the NAAQS are also troubling. Ambient lead levels, particularly in urban areas, may already represent a substantial portion of the lead NAAQS (56 FR 7167, February 21, 1991; 52 FR 16994, May 6, 1987) (existing substantial ambient concentrations of lead justify lowering permissible air emissions for lead from boilers and industrial furnaces burning hazardous waste). Estimates indicate that 300 individuals may be exposed to ambient lead levels above $1.0 \mu\text{g}/\text{m}^3$ (two-thirds the current NAAQS) and 1500 individuals may be exposed to levels above $0.5 \mu\text{g}/\text{m}^3$ (one-third the current NAAQS) due to the area source smelters. Finally, recent scientific information suggests that lead blood levels in children lower than previously thought may cause adverse health effects (56 FR 7167, February 21, 1991; 56 FR 26469, June 7, 1991) (establishing standards for lead in drinking water).

Lead is also persistent in the environment and individuals, particularly children, can be exposed through pathways other than inhalation. The sites of two former smelters have required Federal cleanup action under the Comprehensive Environmental Response, Compensation, and Liability Act, also known as "Superfund." Both sites were contaminated by lead deposition onto surrounding soil. Deposition at these sites was caused by the same types of air emission sources that will be regulated by this rule.

In short, the EPA finds that secondary lead smelter area sources pose potential adverse human health and environmental threats that justify listing under section 112(c)(3). The Agency further finds that MACT standards are the most appropriate for these sources.

The EPA considers the cost impacts of the final rule, including the regulation of area source smelters by MACT standards, to be reasonable. The pollutants being regulated are especially toxic, warranting heightened control. (cf. S. Rept. 228, 101st Cong., 1st sess., 173.) The overall cost-effectiveness of the rule will be about \$1,400 per Mg (\$1,300 per ton) of HAP reduced. The EPA's decision to regulate both major and area sources by the same standards also eliminates the potential for adverse effects on competition within the industry.

Finally, the EPA believes that regulating all smelters under the same regulations is consistent with the Agency's responsibilities for achieving environmental justice under Executive Order (E.O.) No. 12898. Historically, some secondary lead smelters have had adverse impacts on communities that

are disproportionately represented by minority and lower income populations. Some area source smelters are currently located in communities that are disproportionately represented by minority and lower income populations. Therefore, the EPA believes that regulating all smelters under MACT standards addresses the objectives of E.O. 12898.

B. Hydrogen Chloride/Chlorine Emission Standards

The proposed rule contained emission standards and monitoring requirements to control HCl and Cl₂ emissions from all furnace types. Hydrogen chloride and Cl₂ are formed from the combustion of PVC plastic separators that are found in some used lead-acid batteries. The only significant source of HCl/Cl₂ emissions is from feedstock materials containing PVC. At proposal, the EPA believed that many used lead-acid batteries contained PVC separators. Based on the results of tests at several smelters, the EPA predicted at proposal that the addition of soda ash or limestone fluxing agents to the feed material could achieve the same level of HCl/Cl₂ control as an acid gas scrubber, but at a much lower cost. The proposed emission standards and monitoring requirements and the estimated cost impacts were based on the use of fluxing agents.

Several comments were received stating that the feasibility of fluxing as a control may be overstated and scrubbers may be necessary in many cases. Several commenters also asserted that the proposed HCl/Cl₂ emission standards are not needed because PVC is no longer used as a separator material. Information obtained by the EPA since proposal confirms that PVC is no longer used as a separator material and the proportion of spent batteries with PVC is expected to decline as these batteries are removed from service and recycled (Docket Item IV-D-34). In 1990, about 1 percent of scrap batteries processed at lead smelters contained PVC separators. In 1994, less than 0.1 percent of scrap batteries contain PVC. The EPA predicts that by the time existing smelters must demonstrate compliance with these standards in 1997, batteries containing PVC will only be present in the scrap battery inventory in trace amounts, resulting, at most, in only trivial amounts of HCl or Cl₂ air emissions.

Data provided to the EPA since proposal also indicates that the EPA may have overstated the feasibility of fluxing as a control option. At the blast furnace tested by the EPA, powdered fluxing agents were mixed with flue dust in a briquetting machine and the

briquettes were then charged to the furnace. This smelter is the only facility handling flux and flue dust in this manner. After proposal, the operators of a blast-furnace-only smelter that recycled agglomerated flue dust sponsored an HCl testing program in which additional flux was added to the furnace separately in the form of crushed limestone. The test results obtained show that additional fluxing in this manner achieved no incremental reduction in HCl emissions. A reevaluation of the fluxing issue suggests that flux material must be mixed with the flue dust, for example through briquetting, to achieve effective HCl/Cl₂ control. Mixing powdered flux and the flue dust is necessary to achieve a close physical association to promote the chemical reactions that prevent HCl and Cl₂ emissions.

If HCl/Cl₂ control were still required by the rule, those smelters that do not currently operate a scrubber or combine flue dust with flux before charging them to the furnace would need to install and operate a scrubber or reconfigure the flue dust handling and flux delivery system. The cost impacts of the proposed HCl/Cl₂ emission standards, therefore, would be substantially greater than those estimated at proposal. However, as noted above, the EPA predicts that secondary lead smelters will no longer be sources of HCl or Cl₂ emissions when the rule takes effect. For that reason, the EPA is withdrawing the proposed HCl/Cl₂ emission standards and associated monitoring requirements.

Six commenters agreed with the EPA's decision to withdraw the HCl/Cl₂ emission standards and associated monitoring requirements for this rule. Two commenters disagreed with EPA's decision to withdraw the HCl/Cl₂ emission standards. One argued that lead-contaminated personal protective equipment (PPE) that is disposed of in the smelting furnaces could be a source of PVC in addition to battery separators. The other commenter argued for temporary HCl/Cl₂ emission standards for a minimum of 3 to 5 years to confirm that HCl/Cl₂ emissions have been reduced.

Data provided by a smelter operator indicate that less than one ton per year of lead-contaminated PPE is disposed of in the smelting furnace of a large smelter. Only a fraction of PPE is PVC and only a fraction of PVC is chlorine (Docket Item IV-D-47). Therefore, the potential HCl/Cl₂ emissions attributed to PPE disposal is minimal. A worse case estimate of HCl/Cl₂ emissions due to PPE disposal indicates maximum

emissions on the order of a few hundred pounds per year.

In regard to the issuance of temporary standards, pending confirmation that HCl/Cl₂ emissions have been reduced, the EPA acknowledges that such an action would be prudent if the predicted decline in PVC was uncertain. However, the EPA is reasonably confident that the predicted decline in PVC separators in secondary lead smelter feedstock will continue and PVC will be present in only trace quantities by the 1997 effective date of this rule. Therefore, it is EPA's judgement that a temporary HCl/Cl₂ emission standard is unnecessary.

After considering all comments, the EPA believes the HCl/Cl₂ emission standards and associated monitoring requirements should be deleted from the rule.

C. Metal Hazardous Air Pollutant Monitoring Requirements

The proposed rule would have required each smelter to install and operate a COM and establish a site-specific opacity limit during the initial lead compound compliance test for process sources. Exceeding this opacity limit would have constituted a violation of the lead compound emission standard. For process fugitive and fugitive dust sources, the proposed rule required an annual lead test and a baghouse inspection and maintenance plan.

The EPA received many comments that presented technical arguments against the proposed metal HAP monitoring requirements. Several commenters argued that there is a poor correlation among lead, particulate matter, and opacity at low grain loadings. Therefore, the argument goes, opacity cannot be used as a reliable surrogate to indicate compliance with a numerical lead emission limit. Other commenters recommended that other technologies are more reliable, accurate, and cost effective than COM's for detecting broken bags in baghouses, particularly bag leak detection systems using triboelectric or light scattering effects.

Based on these comments and additional information collected from monitoring equipment vendors since proposal, the EPA has revised the metal HAP monitoring requirements. The final monitoring provisions require an SOP for baghouse inspection and maintenance that includes a bag leak detection system with an alarm and a corrective action plan for responding to alarms. The same monitoring requirements will apply to all metal HAP emission sources that are

controlled by baghouses (i.e., process; process fugitive; and fugitive dust sources).

The bag leak detection system must be fully operational prior to the initial lead compliance test. However, the detection system will not be used to monitor compliance with the numerical lead emission limit; it will be used to monitor baghouse performance and operating conditions to indicate baghouse failures.

The EPA agrees that COM's cannot be used to monitor compliance with a numerical lead compound emission limit applicable to secondary lead smelting. Instead, the EPA has determined that compliance can be demonstrated and ensured through well-specified operation and maintenance procedures as delineated in this final rule.

D. Exemption From Resource Conservation and Recovery Act Boiler and Industrial Furnace Emission Standards

The EPA proposed to continue the exemption (40 CFR 266.100(c)) for RCRA regulation of air emissions from secondary lead smelters burning hazardous wastes solely for metal recovery. All commenters agreed that this is an appropriate approach. As the EPA stated at proposal, this exemption is temporary and permanent resolution can be made at the time of the section 112(f) residual risk determination.

V. Administrative Requirements

A. Docket

The docket is an organized and complete file of all the information considered by the EPA in the development of this rulemaking. The docket is a dynamic file, since material is added throughout the rulemaking development. The docket system is intended to allow members of the public and affected industries to readily identify and locate documents so that they can effectively participate in the rulemaking process. Along with the BID's and preambles to the proposed and promulgated standards, the contents of the docket will serve as the official record in case of judicial review (section 307(d)(7)(A) of the Act).

B. Executive Order 12866

The Agency must determine whether a regulatory action is "significant" and therefore subject to OMB review and the requirements of the E.O. 12866, (58 FR 51735, October 4, 1993). The Executive Order defines "significant regulatory action" as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs, or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in the Executive Order.

The EPA has submitted this action to OMB for review. Changes made in response to OMB suggestions or recommendations have been documented in Docket A-92-43 (see the ADDRESSES section of this preamble).

C. Unfunded Mandates Act

Section 202 of the Unfunded Mandates Reform Act of 1995 ("Unfunded Mandates Act") requires that the Agency prepare a budgetary impact statement before promulgating a rule that includes a Federal mandate that may result in expenditure by State, local, and tribal governments, in aggregate, or by the private sector, of \$100 million or more in any 1 year. Section 203 requires the Agency to establish a plan for obtaining input from and informing, educating, and advising any small governments that may be significantly or uniquely affected by the rule.

Under section 205 of the Unfunded Mandates Act, the Agency must identify and consider a reasonable number of regulatory alternatives before promulgating a rule for which a budgetary impact statement must be prepared. The Agency must select from those alternatives the least costly, most cost-effective, or least burdensome alternative that achieves the objectives of the rule, unless the Agency explains why this alternative is not selected or the selection of this alternative is inconsistent with law.

Because this final rule is estimated to result in the expenditure by State, local, and tribal governments or the private sector of significantly less than \$100 million in any 1 year, the Agency has not prepared a budgetary impact statement or specifically addressed the selection of the least costly, most cost-effective, or least burdensome alternative. Because small governments will not be significantly or uniquely affected by this rule, the Agency is not

required to develop a plan with regard to small governments.

D. Paperwork Reduction Act

Information collection requirements associated with this regulation (those included in 40 CFR part 63, subpart A and subpart X) have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq., and have been assigned OMB control number 2060-0296. An Information Collection Request (ICR) document has been prepared by the EPA (ICR No. 1686.02) to reflect the revised information requirements of the final rule and has been submitted to OMB for review. A copy may be obtained from Sandy Farmer, Information Policy Branch, 401 M Street, SW. (2136), Washington, DC 20460, or by calling (202) 260-2740.

The annual industry recordkeeping and reporting burden and costs averaged over the first 3 years for secondary lead smelters are 11,300 hours and \$452,000 per year. This collection of information is estimated to have an annual government recordkeeping and reporting burden averaging 1,600 hours over the first 3 years. These burden estimates include time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

Send comments regarding the burden estimate or any other aspects of this collection of information, including suggestions for reducing this burden to Chief, Information Policy Branch (EPA 2136); U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503, marked "Attention: Desk Officer for the EPA."

E. Regulatory Flexibility Act

The Regulatory Flexibility Act (or RFA, Public Law 96-354, September 19, 1980) requires Federal agencies to give special consideration to the impact of regulation on small businesses. The RFA specifies that a regulatory flexibility analysis must be prepared if a screening analysis indicates a regulation will have a significant economic impact on a substantial number of small entities. For this industry, a small entity is defined as one with 500 or fewer employees. A "substantial number" of small entities is generally considered to be more than 20 percent of the small entities in the affected industry.

Regulatory impacts are considered significant if:

- (1) Annual compliance costs increase total costs of production by more than 5 percent;
- (2) Annual compliance costs as a percent of sales are at least 20 percent higher for small entities;
- (3) Capital cost of compliance represents a significant portion of capital available to small entities; or
- (4) The requirements of the regulation are likely to result in closures of small entities.

The results of the economic assessment performed at proposal served as the regulatory flexibility analysis and indicated that the rule will have an economic impact on small business entities. The assessment has not been updated because the impacts on the small entities have not increased since proposal. However, adverse economic impacts have been minimized to the greatest extent possible in this rulemaking, and those that remain are unavoidable. All of the small entities that are currently operating and that are impacted are major sources of HAP's for which the EPA is required to adopt MACT standards. Consequently, the economic impacts cannot be minimized by promulgating less stringent standards based on generally achievable control technology (GACT). The final standards are based on MACT floor controls, and in no instance did the EPA establish standards based on controls more stringent than the floor. The EPA was also able to identify alternatives to add-on controls (e.g., work practice controls) in the MACT floors that offered equivalent levels of control. The EPA has minimized the impacts associated with monitoring by adopting a surrogate pollutant approach and by allowing for alternative monitoring strategies when available. The impacts on all entities have been reduced since proposal by withdrawing the HCl/Cl₂ emission standards and by revising the metal HAP monitoring requirements. Finally, the EPA has minimized the impacts associated with recordkeeping and reporting by promulgating only the minimum requirements needed to document continuous compliance with the emission limits.

List of Subjects

40 CFR Part 9

Environmental protection, Reporting and recordkeeping requirements.

40 CFR Part 63

Air pollution control, Hazardous substances, Incorporation by reference, Reporting and recordkeeping requirements, Secondary lead smelters.

Dated: May 31, 1995.

Carol M. Browner,
Administrator.

For the reasons set out in the preamble, title 40, chapter I, of the Code of Federal Regulations is amended as follows:

PART 9—[AMENDED]

1. The authority citation for part 9 continues to read as follows:

Authority: 7 U.S.C. 135 et seq., 136-136y; 15 U.S.C. 2001, 2003, 2005, 2006, 2601-2671; 21 U.S.C. 331j, 346a, 348; 31 U.S.C. 9701; 33 U.S.C. 1251 et seq., 1311, 1313d, 1314, 1321, 1326, 1330, 1344, 1345 (d) and (e), 1361; E.O. 11735, 38 FR 21243, 3 CFR, 1971-1975 Comp. p. 973; 42 U.S.C. 241, 242b, 243, 246, 300f, 300g, 300g-1, 300g-2, 300g-3, 300g-4, 300g-5, 300g-6, 300j-1, 300j-2, 300j-3, 300j-4, 300j-9, 1857 et seq., 6901-6992k, 7401-7671q, 7542, 9601-9657, 11023, 11048.

2. Section 9.1 is amended by adding a new entry to the table under the indicated heading to read as follows:

§ 9.1 OMB approvals under the Paperwork Reduction Act.

40 CFR citation	OMB control No.
National Emission Standards for Hazardous Air Pollutants for Source Categories ³	
63.548-63.550	2060-0296

³ The ICRs referenced in this section of the Table encompass the applicable general provisions contained in 40 CFR part 63, subpart A, which are not independent information collection requirements.

PART 63—[AMENDED]

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401 et seq.

2. Part 63 is amended by adding subpart X to read as follows:

Subpart X—National Emission Standards for Hazardous Air Pollutants From Secondary Lead Smelting

Sec.	
63.541	Applicability.
63.542	Definitions.
63.543	Standards for process sources.
63.544	Standards for process fugitive sources.
63.545	Standards for fugitive dust sources.
63.546	Compliance dates.
63.547	Test methods.
63.548	Monitoring requirements.
63.549	Notification requirements.
63.550	Recordkeeping and reporting requirements.

SUBPART X—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FROM SECONDARY LEAD SMELTING

§ 63.541 Applicability.

(a) The provisions of this subpart apply to the following affected sources at all secondary lead smelters: blast, reverberatory, rotary, and electric smelting furnaces; refining kettles; agglomerating furnaces; dryers; process fugitive sources; and fugitive dust sources. The provisions of this subpart do not apply to primary lead smelters, lead refiners, or lead remelters.

(b) Table 1 of this subpart specifies the provisions of subpart A that apply and those that do not apply to owners and operators of secondary lead smelters subject to this subpart.

TABLE 1.—GENERAL PROVISIONS APPLICABILITY TO SUBPART X

Reference	Applies to subpart X	Comment
63.1	Yes.	
63.2	Yes.	
63.3	Yes.	
63.4	Yes.	
63.5	Yes.	
63.6 (a), (b), (c), (e), (f), (g), (i) and (j).	Yes.	
63.6 (d) and (h)	No.	No opacity limits in rule.
63.7	Yes.	
63.8	Yes.	
63.9 (a), (b), (c), (d), (e), (g), (h)(1-3), (h)(5-6), and (j).	Yes.	
63.9 (f) and (h)(4).	No.	No opacity or visible emission limits in subpart X.
63.10	Yes.	
63.11	No.	Flares will not be used to comply with the emission limits.
63.12 to 63.15 ..	Yes.	

§ 63.542 Definitions.

Terms used in this subpart are defined in the Act, in subpart A of this part, or in this section as follows:

Agglomerating furnace means a furnace used to melt into a solid mass flue dust that is collected from a baghouse.

Bag leak detection system means systems that include, but are not limited to, devices using triboelectric, light scattering, and other effects to monitor relative or absolute particulate matter emissions.

Battery breaking area means the plant location at which lead-acid batteries are broken, crushed, or disassembled and separated into components.

Blast furnace means a smelting furnace consisting of a vertical cylinder atop a crucible, into which lead-bearing charge materials are introduced at the top of the furnace and combustion air is introduced through tuyeres at the bottom of the cylinder, and that uses coke as a fuel source and that is operated at such a temperature in the combustion zone (greater than 980 °C) that lead compounds are chemically reduced to elemental lead metal.

Blast furnace charging location means the physical opening through which raw materials are introduced into a blast furnace.

Dryer means a chamber that is heated and that is used to remove moisture from lead-bearing materials before they are charged to a smelting furnace.

Dryer transition piece means the junction between a dryer and the charge hopper or conveyor, or the junction between the dryer and the smelting furnace feed chute or hopper located at the ends of the dryer.

Electric furnace means a smelting furnace consisting of a vessel into which reverberatory furnace slag is introduced and that uses electrical energy to heat the reverberatory furnace slag to such a temperature (greater than 980 °C) that lead compounds are reduced to elemental lead metal.

Enclosure hood means a hood that covers a process fugitive emission source on the top and on all sides, with openings only for access to introduce or remove materials to or from the source and through which an induced flow of air is ventilated.

Fugitive dust source means a stationary source of hazardous air pollutant emissions at a secondary lead smelter that is not associated with a specific process or process fugitive vent or stack. Fugitive dust sources include, but are not limited to, roadways, storage piles, materials handling transfer points, materials transport areas, storage areas, process areas, and buildings.

Furnace and refining/casting area means any area of a secondary lead smelter in which:

- (1) Smelting furnaces are located; or
- (2) Refining operations occur; or
- (3) Casting operations occur.

Materials storage and handling area means any area of a secondary lead smelter in which lead-bearing materials (including, but not limited to, broken battery components, slag, flue dust, and dross) are stored or handled between process steps including, but not limited to, areas in which materials are stored

in piles, bins, or tubs, and areas in which material is prepared for charging to a smelting furnace.

Partial enclosure means a structure that incorporates walls or partitions on at least three sides or three-quarters of the circumference of an area to screen the material or process equipment located therein to prevent the entrainment of particulate matter into the air.

Pavement cleaning means the use of vacuum equipment, water sprays, or a combination thereof to remove dust or other accumulated material from the paved areas of a secondary lead smelter.

Plant roadway means any area of a secondary lead smelter that is subject to vehicle traffic, including traffic by fork lifts, front-end loaders, or vehicles carrying whole batteries or cast lead ingots. Excluded from this definition are employee and visitor parking areas, provided they are not subject to traffic by vehicles carrying lead-bearing materials.

Process fugitive emission source means a source of hazardous air pollutant emissions at a secondary lead smelter that is associated with lead smelting or refining but is not the primary exhaust stream from a smelting furnace and is not a fugitive dust source. Process fugitive sources include, but are not limited to, smelting furnace charging points, smelting furnace lead and slag taps, refining kettles, agglomerating furnaces, and drying kiln transition pieces.

Refining kettle means an open-top vessel that is constructed of cast iron or steel and is indirectly heated from below and contains molten lead for the purpose of refining and alloying the lead. Included are pot furnaces, receiving kettles, and holding kettles.

Reverberatory furnace means a refractory-lined furnace that uses one or more flames to heat the walls and roof of the furnace and lead-bearing scrap to such a temperature (greater than 980 °C) that lead compounds are chemically reduced to elemental lead metal.

Rotary furnace (also known as a rotary reverberatory furnace) means a furnace consisting of a refractory-lined chamber that rotates about a horizontal axis and that uses one or more flames to heat the walls of the furnace and lead-bearing scrap to such a temperature (greater than 980 °C) that lead compounds are chemically reduced to elemental lead metal.

Secondary lead smelter means any facility at which lead-bearing scrap material, primarily but not limited to lead-acid batteries, is recycled into elemental lead by smelting.

Smelting means the chemical reduction of lead compounds to lead metal in high-temperature furnaces including, but not limited to, blast furnaces, reverberatory furnaces, rotary furnaces, and electric furnaces.

Total enclosure means a building with a roof and walls or partitions on all sides or the entire circumference to shelter the materials and/or process equipment located therein to prevent the entrainment of particulate matter into the air and with openings only to allow access and egress for people and vehicles.

Vehicle wash means a device for removing dust and other accumulated material from the wheels, body, and underside of a vehicle to prevent the inadvertent transfer of lead-contaminated material to another area of a secondary lead smelter or to public roadways.

Wet suppression means the use of water, water combined with a chemical surfactant, or a chemical binding agent to prevent the entrainment of dust into the air from fugitive dust sources.

§ 63.543 Standards for process sources.

(a) No owner or operator of a secondary lead smelter shall discharge or cause to be discharged into the atmosphere from any existing, new, or reconstructed blast, reverberatory, rotary, or electric smelting furnace any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains of lead per dry standard cubic foot).

(b) [Reserved]

(c) No owner or operator of a secondary lead smelter with a

collocated blast furnace and reverberatory furnace shall discharge or cause to be discharged into the atmosphere from any existing, new, or reconstructed blast furnace or reverberatory furnace any gases that contain total hydrocarbons in excess of 20 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide, except as allowed under paragraphs (c)(1) and (c)(2) of this section.

(1) No owner or operator of a secondary lead smelter with a collocated blast furnace and reverberatory furnace shall discharge or cause to be discharged into the atmosphere from any existing blast furnace any gases that contain total hydrocarbons in excess of 360 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide, during periods when the reverberatory furnace is not operating.

(2) No owner or operator of a secondary lead smelter with a collocated blast furnace and reverberatory furnace shall discharge or cause to be discharged into the atmosphere from any blast furnace that commences construction or reconstruction after June 9, 1994, any gases that contain total hydrocarbons in excess of 70 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide, during periods when the reverberatory furnace is not operating.

(d) No owner or operator of a secondary lead smelter with only blast furnaces shall discharge or cause to be discharged into the atmosphere from any existing blast furnace any gases that

contain total hydrocarbons in excess of 360 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide.

(e) No owner or operator of a secondary lead smelter with only blast furnaces shall discharge or cause to be discharged into the atmosphere from any blast furnace that commences construction or reconstruction after June 9, 1994, any gases that contain total hydrocarbons in excess of 70 parts per million by volume, expressed as propane corrected to 4 percent carbon dioxide.

(f) If the owner or operator of a blast furnace or collocated blast and reverberatory furnace combines the blast furnace charging process fugitive emissions with the blast furnace process emissions and discharges them to the atmosphere through a common emission point, then compliance with the applicable total hydrocarbon concentration limit under paragraph (c) of this section shall be determined downstream from the point at which the two emission streams are combined.

(g) If the owner or operator of a blast furnace or a collocated blast and reverberatory furnace does not combine the blast furnace charging process fugitive emissions with the blast furnace process emissions and discharges such emissions to the atmosphere through separate emission points, then the total hydrocarbon emission rate for the blast furnace process fugitive emissions shall not be greater than 0.20 kilograms per hour (0.44 pounds per hour).

(h) The standards for process sources are summarized in table 2.

TABLE 2.—SUMMARY OF STANDARDS FOR PROCESS SOURCES

Furnace configuration	Lead compounds (milligrams per dry standard cubic meter)	Total hydrocarbons	Citation
Collocated reverberatory/blast (when both furnaces operating).	2.0	20 parts per million by volume ¹	§ 63.543 (a), (c).
(when reverberatory furnace not operating)	2.0	360 parts per million by volume ¹ (existing) 70 parts per million by volume ¹ (new) ²	§ 63.543 (a), (c)(1). § 63.543 (a), (c)(2).
Blast	2.0	360 parts per million by volume ¹ (existing) 70 parts per million by volume ¹ (new) ² 0.20 kilograms per hour ³	§ 63.543 (a), (c). § 63.543 (e). § 63.543 (g).
Reverberatory, rotary, and electric	2.0	None	§ 63.543 (a).

¹ Total hydrocarbons emission limits are as propane at 4 percent carbon dioxide to correct for dilution, based on a 3-hour average.

² New sources include those furnaces that commence construction or reconstruction after June 9, 1994.

³ Applicable to blast furnace charging process fugitive emissions that are not combined with the blast furnace process emissions prior to the point at which compliance with the total hydrocarbons concentration standard is determined.

§ 63.544 Standards for process fugitive sources.

(a) Each owner or operator of a secondary lead smelter shall control the

process fugitive emission sources listed in paragraphs (a)(1) through (a)(6) of this section by complying with either paragraph (b) or (c) of this section.

(1) Smelting furnace and dryer charging hoppers, chutes, and skip hoists;

(2) Smelting furnace lead taps and molds;
 (3) Smelting furnace slag taps and molds;
 (4) Refining kettles;
 (5) Dryer transition pieces; and
 (6) Agglomerating furnace product taps.
 (b) All process fugitive emission sources listed in paragraphs (a)(1) through (a)(6) of this section shall be controlled by an enclosure hood meeting the requirements of paragraphs (b)(1), (b)(2), or (b)(3) of this section except those meeting the requirements of paragraph (c) of this section. All enclosure hoods shall be ventilated to a control device that shall not discharge to the atmosphere any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains of lead per dry standard cubic foot).

(1) All process fugitive enclosure hoods except those specified for refining kettles and dryer transition pieces shall be ventilated to maintain a face velocity of at least 90 meters per minute (300 feet per minute) at all hood openings.
 (2) Process fugitive enclosure hoods required for refining kettles in paragraph (a) of this section shall be ventilated to maintain a face velocity of at least 75 meters per minute (250 feet per minute).
 (3) Process fugitive enclosure hoods required over dryer transition pieces in paragraph (a) of this section shall be ventilated to maintain a face velocity of at least 110 meters per minute (350 feet per minute).
 (c) All process fugitive emission sources listed in paragraphs (a)(1) through (a)(6) of this section except those controlled by hoods meeting the requirements of paragraphs (b)(1)

through (b)(3) of this section shall be located in a total enclosure that is ventilated to achieve an air velocity into the enclosure at all doorway openings of not less than 75 meters per minute (250 feet per minute). This enclosure shall be ventilated to a control device that shall not discharge to the atmosphere any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains per dry standard cubic foot).
 (d) All dryer emission vents and agglomerating furnace emission vents shall be ventilated to a control device that shall not discharge to the atmosphere any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains per dry standard cubic foot).
 (e) The standards for process fugitive sources are summarized in table 3.

TABLE 3.—SUMMARY OF STANDARDS FOR PROCESS FUGITIVE SOURCES

Fugitive emission source	Control device lead compound emission limit (milligrams per dry standard cubic meter)	Enclosed hood or doorway face velocity (meters/minute)	Citation
Control Option I:			
Smelting furnace and dryer charging hoppers, chutes, and skip hoists	2.0	¹ 90	§ 63.544(b)
Smelting furnace lead taps and molds	2.0	¹ 90	§ 63.544(b)
Smelting furnace slag taps and molds	2.0	¹ 90	§ 63.544(b)
Refining kettles	2.0	¹ 75	§ 63.544(b)
Dryer transition pieces	2.0	¹ 110	§ 63.544(b)
Agglomerating furnace process vents and product taps	2.0	¹ 90	§ 63.544(b)
Control Option II:			
Enclosed building ventilated to a control device	2.0	² 75	§ 63.544(c)
Applicable to Both Control Options:			
Dryer and agglomerating furnace emission vents	2.0		§ 63.544(d)

¹ Enclosure hood face velocity applicable to those process fugitive sources not located in an enclosed building ventilated to a control device.
² Building doorway air velocity measured at all doorways that are normally open during operations.

§ 63.545 Standards for fugitive dust sources.

(a) Each owner or operator of a secondary lead smelter shall prepare and at all times operate according to a standard operating procedures manual that describes in detail the measures that will be put in place to control fugitive dust emission sources within the areas of the secondary lead smelter listed in paragraphs (a)(1) through (a)(5) of this section.
 (1) Plant roadways;
 (2) Battery breaking area;
 (3) Furnace area;
 (4) Refining and casting area; and
 (5) Materials storage and handling area.

(b) The standard operating procedures manual shall be submitted to the

Administrator or delegated authority for review and approval.

(c) The controls specified in the standard operating procedures manual shall at a minimum include the requirements of paragraphs (c)(1) through (c)(5) of this section.

(1) Plant roadways—paving of all areas subject to vehicle traffic and pavement cleaning twice per day of those areas, except on days when natural precipitation makes cleaning unnecessary or when sand or a similar material has been spread on plant roadways to provide traction on ice or snow.

(2) Battery breaking area—partial enclosure of storage piles, wet suppression applied to storage piles with sufficient frequency and quantity

to prevent the formation of dust, and pavement cleaning twice per day; or total enclosure of the battery breaking area in a structure meeting the requirements of 40 CFR 265.1101(a) and (c) and ventilation of the enclosure to a control device.

(3) Furnace area—partial enclosure and pavement cleaning twice per day; or total enclosure in a structure meeting the requirements of 40 CFR 265.1101(a) and (c) and ventilation of the enclosure to a control device.

(4) Refining and casting area—partial enclosure and pavement cleaning twice per day; or total enclosure in a structure meeting the requirements of 40 CFR 265.1101(a) and (c) and ventilation of the enclosure to a control device.

(5) Materials storage and handling area—partial enclosure of storage piles, wet suppression applied to storage piles with sufficient frequency and quantity to prevent the formation of dust, vehicle wash at each exit from the area, and paving of the area; or total enclosure of the area in a structure meeting the requirements of 40 CFR 265.1101(a) and (c) and ventilation of the enclosure to a control device and a vehicle wash at each exit.

(d) The standard operating procedures manual shall require that daily records be maintained of all wet suppression, pavement cleaning, and vehicle washing activities performed to control fugitive dust emissions.

(e) No owner or operator of a secondary lead smelter shall discharge or cause to be discharged into the atmosphere from any building or enclosure ventilation system any gases that contain lead compounds in excess of 2.0 milligrams of lead per dry standard cubic meter (0.00087 grains of lead per dry standard cubic foot).

§ 63.546 Compliance dates.

(a) Each owner or operator of an existing secondary lead smelter shall achieve compliance with the requirements of this subpart no later than June 23, 1997.

(b) Each owner or operator of a secondary lead smelter that commences construction or reconstruction after June 9, 1994, shall achieve compliance with the requirements of this subpart by June 23, 1995 or upon startup of operations, whichever is later.

§ 63.547 Test methods.

(a) The following test methods in appendix A of part 60 of this chapter in paragraphs (a)(1) through (a)(5) of this section shall be used to determine compliance with the emission standards for lead compounds under §§ 63.543(a), 63.544(b), (c), and (d), and 63.545(e):

(1) Method 1 shall be used to select the sampling port location and the number of traverse points.

(2) Method 2 shall be used to measure volumetric flow rate.

(3) Method 3 shall be used for gas analysis to determine the dry molecular weight of the stack gas.

(4) Method 4 shall be used to determine moisture content of the stack gas.

(5) Method 12 shall be used to determine compliance with the lead compound emission standards. The minimum sample volume shall be 0.85 dry standard cubic meters (30 dry standard cubic feet) and the minimum sampling time shall be 60 minutes for each run. Three runs shall be performed

and the average of the three runs shall be used to determine compliance.

(b) The following test methods in appendix A of part 60 listed in paragraphs (b)(1) through (b)(5) of this section shall be used, as specified, to determine compliance with the emission standards for total hydrocarbons under § 63.543(c), (d), (e), and (g):

(1) Method 1 shall be used to select the sampling port location to determine compliance under § 63.543(c), (d), (e), and (g).

(2) Method 2 shall be used to measure volumetric flow rate to determine compliance under § 63.543(g).

(3) The Single Point Integrated Sampling and Analytical Procedure of Method 3B shall be used to measure the carbon dioxide content of the stack gases to determine compliance under § 63.543(c), (d), and (e).

(4) Method 4 shall be used to measure moisture content of the stack gases to determine compliance under § 63.543(c), (d), (e), and (g).

(5) Method 25A shall be used to measure total hydrocarbon emissions to determine compliance under § 63.543(c), (d), (e), and (g). The minimum sampling time shall be 1 hour for each run. A minimum of three runs shall be performed. A 1-hour average total hydrocarbon concentration shall be determined for each run and the average of the three 1-hour averages shall be used to determine compliance. The total hydrocarbon emissions concentrations for determining compliance under § 63.543(c), (d), and (e) shall be expressed as propane and shall be corrected to 4 percent carbon dioxide, as described in paragraph (c) of this section.

(c) For the purposes of determining compliance with the emission limits under § 63.543(c), (d), and (e), the measured total hydrocarbon concentrations shall be corrected to 4 percent carbon dioxide as listed in paragraphs (c)(1) through (c)(2) of this section in the following manner:

(1) If the measured percent carbon dioxide is greater than 0.4 percent in each compliance test, the correction factor shall be determined by using the following equation:

$$F = \frac{4.0}{CO_2}$$

where:

F=correction factor (no units)

CO₂=percent carbon dioxide measured using Method 3B, where the measured carbon dioxide is greater than 0.4 percent.

(2) If the measured percent carbon dioxide is equal to or less than 0.4 percent, then a correction factor (F) of 10 shall be used.

(3) The corrected total hydrocarbon concentration shall be determined by multiplying the measured total hydrocarbon concentration by the correction factor (F) determined for each compliance test.

(d) Compliance with the face velocity requirements under § 63.544(b) and (c) for process fugitive enclosure hoods shall be determined by the following test methods in paragraph (d)(1) or (d)(2) of this section.

(1) Owners and operators shall calculate face velocity using the procedures in paragraphs (d)(1)(i) through (d)(1)(iv) of this section.

(i) Method 1 shall be used to select the sampling port location in the duct leading from the process fugitive enclosure hood to the control device.

(ii) Method 2 shall be used to measure the volumetric flow rate in the duct from the process fugitive enclosure hood to the control device.

(iii) The face area of the hood shall be determined from measurement of the hood. If the hood has access doors, then face area shall be determined with the access doors in the fully open position.

(iv) Face velocity shall be determined by dividing the volumetric flow rate determined in paragraph (d)(1)(ii) of this section by the total face area for the hood determined in paragraph (d)(1)(iii) of this section.

(2) The face velocity shall be measured directly using the procedures in paragraphs (d)(2)(i) through (d)(2)(vi) of this section.

(i) A propeller anemometer or equivalent device shall be used to measure hood face velocity.

(ii) The propeller of the anemometer shall be made of a material of uniform density and shall be properly balanced to optimize performance.

(iii) When the anemometer is mounted with the propeller shaft in a horizontal position, the threshold velocity of the anemometer shall not exceed 15 meters per minute (50 feet per minute) as determined by a procedure equivalent to that in Method 14 of appendix A of part 60.

(iv) The measurement range of the anemometer shall extend to at least 300 meters per minute (1,000 feet per minute).

(v) A known relationship shall exist between the anemometer signal output and air velocity, and the anemometer must be equipped with a suitable readout system.

(vi) Hood face velocity shall be determined for each hood during

normal operation with all access doors in the open position and by placing the anemometer in the plane of the hood opening.

(e) Owners and operators shall measure doorway air velocity to determine compliance with the doorway velocity requirement for enclosed buildings in § 63.544(c) using the procedures in paragraphs (e)(1) and (e)(2) of this section.

(1) Owners and operators shall use a propeller anemometer or equivalent device meeting the requirements of paragraphs (d)(2)(ii) through (d)(2)(v) of this section.

(2) Doorway air velocity into the building shall be determined for each doorway in the open position during normal operation by placing the anemometer in the plane of the doorway opening.

§ 63.548 Monitoring requirements.

(a) Owners and operators of secondary lead smelters shall prepare, and at all times operate according to, a standard operating procedures manual that describes in detail procedures for inspection, maintenance, and bag leak detection and corrective action plans for all baghouses (fabric filters) that are used to control process, process fugitive, or fugitive dust emissions from any source subject to the lead emission standards in §§ 63.543, 63.544, and 63.545, including those used to control emissions from building ventilation. This provision shall not apply to process fugitive sources that are controlled by wet scrubbers.

(b) The standard operating procedures manual for baghouses required by paragraph (a) of this section shall be submitted to the Administrator or delegated authority for review and approval.

(c) The procedures specified in the standard operating procedures manual for inspections and routine maintenance shall, at a minimum, include the requirements of paragraphs (c)(1) through (c)(12) of this section.

(1) Daily monitoring of pressure drop across each baghouse cell.

(2) Daily visual observation of baghouse discharge or stack.

(3) Daily visual inspection to ensure that dust is being removed from hoppers.

(4) Daily check of compressed air supply for pulse-jet baghouses.

(5) Daily visual inspection of isolation dampers for proper operation.

(6) Daily monitoring of cleaning cycle by observing meters or control panel instrumentation.

(7) Weekly visual inspection of bag cleaning mechanisms for proper functioning.

(8) Weekly check of bag tension on reverse air and shaker type baghouses.

(9) Monthly visual inspection of baghouse interior for air leaks.

(10) Monthly inspection of bags and bag connections.

(11) Monthly inspection of fans for wear, material buildup, and corrosion.

(12) Continuous operation of a bag leak detection system.

(d) The procedures specified in the standard operating procedures manual for maintenance shall, at a minimum, include a preventative maintenance schedule that is consistent with the baghouse manufacturer's instructions for routine and long-term maintenance.

(e) The bag leak detection system required by paragraph (c)(12) of this section, shall meet the specifications and requirements of paragraphs (e)(1) through (e)(5) of this section.

(1) The bag leak detection system must be capable of detecting particulate matter emissions at concentrations of 1.0 milligram per actual cubic meter (0.00044 grains per actual cubic foot) or less.

(2) The bag leak detection system sensor must provide output of relative or absolute particulate matter emissions.

(3) The bag leak detection system must be equipped with an alarm system that will alarm when an increase in particulate emissions is detected.

(4) For negative pressure or induced air baghouses, the bag leak detector must be installed downstream of the baghouse and upstream of any wet acid gas scrubber. For positive pressure baghouses, a bag leak detector must be installed in each baghouse compartment or cell. Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(5) The bag leak detection system shall be installed and operated in a manner consistent with available guidance from the U.S. Environmental Protection Agency or, in the absence of such guidance, the manufacturer's written specifications and recommendations for installation, operation, and calibration of the system. The calibration of the system shall, at a minimum, consist of establishing the relative baseline output level by adjusting the sensitivity and the averaging period of the device, and establishing the alarm set points and the alarm delay time. The system must be fully operational at the time of the initial lead compliance test required to demonstrate compliance with the applicable lead emission standard under §§ 63.543, 63.544, or 63.545. The owner or operator shall not adjust the sensitivity, averaging period, alarm set

points, or alarm delay time after the initial lead compliance test unless a test is performed to demonstrate compliance with the applicable lead emission standard after the adjustments are made.

(f) The standard operating procedures manual required by paragraph (a) of this section shall include a corrective action plan that specifies the procedures to be followed in the case of a bag leak detection system alarm. The corrective action plan shall include, at a minimum, the procedures used to determine and record the time and cause of the alarm as well as the corrective actions taken to correct the control device malfunction or minimize emissions as specified in paragraphs (f)(1) and (f)(2) of this section.

(1) The procedures used to determine the cause of the alarm must be initiated within 30 minutes of the alarm.

(2) The cause of the alarm must be alleviated by taking the necessary corrective action(s) which may include, but not be limited to, paragraphs (f)(1)(i) through (f)(2)(vi) of this section.

(i) Inspecting the baghouse for air leaks, torn or broken filter elements, or any other malfunction that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media, or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.

(vi) Shutting down the process producing the particulate emissions.

(g) The owner or operator of a secondary lead smelter that uses a wet scrubber to control particulate matter and metal hazardous air pollutant emissions from a process fugitive source shall monitor and record the pressure drop and water flow rate of the wet scrubber during the initial test to demonstrate compliance with the lead emission limit under § 63.544(d).

Thereafter, the owner or operator shall monitor and record the pressure drop and water flow rate at least once every hour and shall maintain the pressure drop and water flow rate no lower than 30 percent below the pressure drop and water flow rate measured during the initial compliance test.

(h) The owner or operator of a blast furnace or collocated reverberatory and blast furnace subject to the total hydrocarbon standards in § 63.543(c), (d), or (e), must comply with the requirements of either paragraph (h)(1) or (h)(2) of this section, to demonstrate

continuous compliance with the total hydrocarbon emission standards.

(1) *Continuous Temperature Monitoring*—(i) The owner or operator of a blast furnace or a collocated reverberatory furnace and blast furnace subject to the total hydrocarbon emission standards in § 63.543(c), (d), or (e) shall install, calibrate, maintain, and continuously operate a device to monitor and record the temperature of the afterburner or the combined blast furnace and reverberatory furnace exhaust streams consistent with the requirements for continuous monitoring systems in subpart A, General Provisions.

(ii) The owner or operator of a blast furnace or a collocated reverberatory furnace and blast furnace subject to the total hydrocarbon emission standards shall monitor and record the temperature of the afterburner or the combined blast furnace and reverberatory furnace exhaust streams every 15 minutes during the total hydrocarbon compliance test and determine an arithmetic average for the recorded temperature measurements.

(iii) To remain in compliance with the standards for total hydrocarbons, the owner or operator must maintain an afterburner or combined exhaust temperature such that the average temperature in any 3-hour period does not fall more than 28 °C (50 °F) below the average established in paragraph (h)(1)(ii) of this section. An average temperature in any 3-hour period that falls more than 28 °C (50 °F) below the average established in paragraph (h)(1)(ii) of this section, shall constitute a violation of the applicable emission standard for total hydrocarbons under § 63.543(c), (d), or (e).

(2) *Continuous Monitoring of Total Hydrocarbon Emissions*—

(i) The owner or operator of a secondary lead smelter shall install, operate, and maintain a total hydrocarbon continuous monitoring system and comply with all of the requirements for continuous monitoring systems found in subpart A, General Provisions.

(ii) Allowing the 3-hour average total hydrocarbon concentration to exceed the applicable total hydrocarbon emission limit under § 63.543 shall constitute a violation of the applicable emission standard for total hydrocarbons under § 63.543(c), (d), or (e).

§ 63.549 Notification requirements.

(a) The owner or operator of a secondary lead smelter shall comply with all of the notification requirements

of § 63.9 of subpart A, General Provisions.

(b) The owner or operator of a secondary lead smelter shall submit the fugitive dust control standard operating procedures manual required under § 63.545(a) and the standard operating procedures manual for baghouses required under § 63.548(a) to the Administrator or delegated authority along with a notification that the smelter is seeking review and approval of these plans and procedures. Owners or operators of existing secondary lead smelters shall submit this notification no later than December 23, 1996. The owner or operator of a secondary lead smelter that commences construction or reconstruction after June 9, 1994, shall submit this notification no later than 180 days before startup of the constructed or reconstructed secondary lead smelter, but no sooner than June 23, 1995.

§ 63.550 Recordkeeping and reporting requirements.

(a) Each owner or operator of a secondary lead smelter shall maintain for a period of 5 years, records of the information listed in paragraphs (a)(1) through (a)(8) of this section.

(1) The results of initial and subsequent compliance tests for lead compounds and total hydrocarbons.

(2) An identification of the date and time of all bag leak detection system alarms, their cause, and an explanation of the corrective actions taken.

(3) If an owner or operator chooses to demonstrate continuous compliance with the total hydrocarbon emission standards under § 63.543(c), (d), or (e) by employing the method allowed in § 63.548(h)(1), the records shall include the output from the continuous temperature monitor, an identification of periods when the 3-hour average temperature fell below the minimum established under § 63.548(h)(1), and an explanation of the corrective actions taken.

(4) If an owner or operator chooses to demonstrate continuous compliance with the total hydrocarbon emission standard under § 63.543(c), (d), or (e) by employing the method allowed in § 63.548(h)(2), the records shall include the output from the total hydrocarbon continuous monitoring system, an identification of the periods when the 3-hour average total hydrocarbon concentration exceeded the applicable standard and an explanation of the corrective actions taken.

(5) Records of maintenance, calibration, or other procedures required by this rule for any monitoring system

used to demonstrate compliance with an applicable requirement.

(6) Any recordkeeping required as part of the practices described in the standard operating procedures manual required under § 63.545(a) for the control of fugitive dust emissions.

(7) Any recordkeeping required as part of the practices described in the standard operating procedures manual for baghouses required under § 63.548(a).

(8) Records of the pressure drop and water flow rate for wet scrubbers used to control metal hazardous air pollutant emissions from process fugitive sources.

(b) The owner or operator of a secondary lead smelter shall comply with all of the reporting requirements under § 63.10 of the General Provisions. The submittal of reports shall be no less frequent than specified under § 63.10(e)(3) of the General Provisions. Once a source reports a violation of the standard or excess emissions, the source shall follow the reporting format required under § 63.10(e)(3) until a request to reduce reporting frequency is approved.

(c) The reports required under paragraph (b) of this section shall include the information specified in paragraphs (c)(1) through (c)(6) of this section.

(1) The report shall include records of all alarms from the bag leak detection system specified in § 63.548(e).

(2) The report shall include a description of the procedures taken following each bag leak detection system alarm pursuant to § 63.548(f)(1) and (2).

(3) The report shall include the information specified in either paragraph (c)(3)(i) or (c)(3)(ii) of this section, consistent with the monitoring option selected under § 63.548(h).

(i) A record of the temperature monitor output, in 3-hour block averages, for those periods when the temperature monitored pursuant to § 63.548(h)(1) fell below the level established in § 63.548(h)(1).

(ii) A record of the total hydrocarbon concentration, in 3-hour block averages, for those periods when the total hydrocarbon concentration being monitored pursuant to § 63.548(h)(2) exceeds the relevant limits established in § 63.543(c), (d), and (e).

(4) The reports required under paragraph (b) of this section shall contain a summary of the records maintained as part of the practices described in the standard operating procedures manual for baghouses required under § 63.548(a) including an explanation of the periods when the

procedures were not followed and the corrective actions taken.

(5) The reports required under paragraph (b) of this section shall contain an identification of the periods when the pressure drop and water flow rate of wet scrubbers used to control process fugitive sources dropped below the levels established in § 63.548(g) and an explanation of the corrective actions taken.

(6) The reports required under paragraph (b) of this section shall contain a summary of the fugitive dust control measures performed during the required reporting period, including an explanation of the periods when the procedures outlined in the standard operating procedures manual pursuant to § 63.545(a) were not followed and the corrective actions taken. The reports shall not contain copies of the daily records required to demonstrate compliance with the requirements of the standard operating procedures manuals required under §§ 63.545(a) and 63.548(a).

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40 CFR Part 52

[A-15-1-6829a; FRL-5210-5]

Approval and Promulgation of Implementation Plans; State of Iowa

AGENCY: Environmental Protection Agency (EPA).

ACTION: Direct final rule.

SUMMARY: This final action approves the State Implementation Plan (SIP) revision submitted by the state of Iowa. The revision includes special requirements for nonattainment areas, compliance and enforcement information, and adoption of EPA definitions. These revisions strengthen the SIP with respect to attainment and maintenance of established air quality standards.

DATES: This action will be effective August 22, 1995 unless by July 24, 1995 adverse or critical comments are received.

ADDRESSES: Comments may be mailed to Christopher D. Hess, Environmental Protection Agency, Air Branch, 726 Minnesota Avenue, Kansas City, Kansas 66101. Copies of the documents relevant to this action are available for public inspection during normal business hours at the: Environmental Protection Agency, Air Branch, 726 Minnesota Avenue, Kansas City, Kansas 66101; and EPA Air & Radiation Docket and

Information Center, 401 M Street, SW, Washington, DC 20460.

FOR FURTHER INFORMATION CONTACT: Christopher D. Hess at (913) 551-7213.

SUPPLEMENTARY INFORMATION: The state of Iowa operates a Federally approved SIP that implements various requirements of the Clean Air Act (Act) and the Code of Federal Regulations (CFR). Since the initial approval of its SIP in 1972, numerous revisions and updates have been made in response to Federal requirements.

In accordance with 40 CFR 51.103, the state of Iowa has requested approval of two SIP revisions under the authority and signature of the Governor's designee, Larry J. Wilson, Director, Iowa Department of Natural Resources (IDNR). Requests were received by the EPA on October 18, 1994, and January 26, 1995. Both of these submittals were deemed complete in accordance with the criteria specified in 40 CFR part 51, appendix V. The state has provided evidence of the lawful adoption of regulations, public notice, and public hearing requirements for each submittal.

Rule Revisions

A. Special Requirements for Nonattainment Areas

The state of Iowa currently has one nonattainment area, in Muscatine for SO₂. In response to the requirements of the Act, as amended in 1990, the state has adopted the following rules.

1. In IAC 567-22.5 (1), the state amends its definition of "major stationary source" to conform to the requirements of Part D of the Act. The Act provides, in general, that a source which emits, or has the potential to emit, 100 tons per year or more of a regulated pollutant is a major source. Part D provides lower cutoff levels for some nonattainment areas, depending on the classification of the area.

Specifically, in response to the following cited sections of the Act, the state has added the major source emissions thresholds for the following pollutants: Ozone precursors (section 182), ozone precursors in ozone transport regions (section 184), carbon monoxide (section 186), and PM₁₀ (section 188).

2. In subrule 22.5(1)"F"(2), the state also amends the definition of "net emissions increase" as it relates to major sources for nonattainment areas. Previously, a net emissions increase was considered contemporaneous with the particular change if it occurred between January 1, 1978, and the date that the increase from the particular change occurred. The state now uses a date five years before construction of the

particular change rather than the fixed date of January 1, 1978.

This revision, although not required as a result of the 1990 Amendments to the Act, is consistent with the EPA's requirements at 40 CFR 51.165(a)(1)(vi) relating to calculation of net emissions increases for permitting applicability purposes.

3. In subrule 22.5(1)"m," the state has expanded its definition of "enforceable permit condition" to include requirements of Title V operating permits. This recognizes that limitations in those operating permits will qualify as federally enforceable restrictions which can be utilized in determining source applicability in the state's permitting programs.

4. In subrule 22.5(2), the state updates its emission offset applicability provisions to conform with the requirements of the 1990 Amendments. In particular:

a. The reference to 40 CFR 81.316 is updated to include amendments through March 10, 1994, pertaining to particulate matter nonattainment areas.

b. In this same subrule, the state deletes the provision that previously allowed the director to relieve an applicant from the obligation of continuing to implement offset requirements of a nonattainment construction permit if an area is subsequently redesignated attainment or unclassified. This measure is necessary to help ensure maintenance of the air quality standards after an area is redesignated to attainment.

c. The state deletes the reference to secondary standard particulate matter nonattainment areas. This reflects the fact that the current particulate matter standards are the same for the primary and secondary standards.

d. The state adds a requirement for offsets in sulfur dioxide (SO₂) nonattainment areas in subrule 22.5(2)b. As discussed in more detail below, EPA has determined that this addition strengthens the SIP and is therefore approvable.

e. The state also deletes subrule 22.5(2)c which previously provided a "loophole" for sources in secondary particulate matter nonattainment areas to claim that offsets were not reasonably available. This action strengthens the SIP by requiring sources to achieve offsets that conform with the Act.

f. Due to the new 22.5(2)b and deletion of 22.5(2)c, the former 22.5(2) d, e, and f become 22.5(2) c, d, and e.

5. Rule 22.5(3) previously allowed a source in a secondary particulate matter nonattainment area to submit proposals for emission offsets or a demonstration that offsets were not reasonably