



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

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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.

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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. Helladay
SWD

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 ⁴ 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/dscf 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)(1)

(6) SPS 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

<u>Operation</u>	<u>Sampling Time</u>
Start: <u>0700</u>	Start: _____
End: <u>0700</u>	End: _____

Elapsed Time: 24 Hours Idle Time During Cycle: 0 Hours

Data On Actual Process Rate During Operation Cycle

Material: <u>Lead Scrap</u>	Rate: <u>8,000</u> Lbs/Hr.
Material: <u>Coke</u>	Rate: <u>640</u> Lbs/Hr.
Material: <u>Limestone</u>	Rate: <u>200</u> Lbs/Hr.
Material: <u>Cast Iron</u>	Rate: <u>275</u> Lbs/Hr.
Material: <u>Re-Run Slag</u>	Rate: <u>445</u> 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 M. 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			0.02	0.65			
AO29-173309					4.65	5	
REFINING		lbs/hour	0.12	4.04			
AO29-173310	12	LEAD			6.14	4.58	
BLAST			lbs/hour	0.01	1.81		
TAPPING			lbs/hour	0.00	0.06		
CHARGING			0.00	0.22			
AO29-173309					4.65	5	
REFINING		lbs/hour	0.00	0.20			
	6	SO₂					
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. Claret Holladay~~

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:

9 Sept 95

PHONE:

19535

Fils



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
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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