

3-20-96

Florida Department of
Environmental Protection

Memorandum

TO: Iwan Choronenko/Jerry Campbell

FROM: Clair Fancy

DATE: March 20, 1996

SUBJ: Consent Order for Gulf Coast Recycling, Inc.
(PSD-FL-215)

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

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

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

CHF/AAL

c: Jim Pennington, BAR
Bill Thomas, SWD

TO: Iwan Choronenko/Jerry Campbell
FROM: Clair Fancy
DATE: March 20, 1996
SUBJ: Consent Order for Gulf Coast Recycling, Inc.
(PSD-FL-215)

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

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

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

CHF/AAL

c: Jim Pennington, BAR
Bill Thomas, SWD

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of an
Application for permit by:

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

Mr. Willis Kitchen
President
Gulf Coast Recycling, Inc.

RECEIVED

MAR 15 1996

REQUEST FOR EXTENSION OF TIME

BUREAU OF
AIR REGULATION

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

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

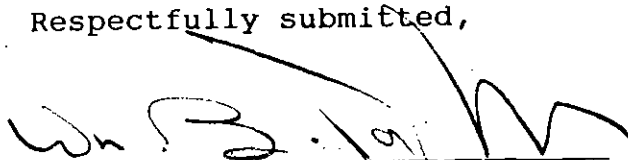
1. Gulf Coast previously requested an extension of time to file an administrative petition. On November 21, 1995 GCR received a letter of incompleteness from the Department of Environmental Protection ("DEP") on this application. GCR has responded to the comments by DEP. GCR is awaiting DEP's response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

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

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

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

Respectfully submitted,



WILLIAM B. TAYLOR, IV, ESQUIRE
Fla. Bar No. 144329
SCOTT C. DAVIS, ESQUIRE
Fla. Bar No. 022799
Macfarlane Ausley Ferguson
& McMullen
Post Office Box 1531
Tampa, Florida 33601
(813) 273-4228
Attorney for Petitioner

cc: Gulf Coast Recycling, Inc.

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



GULF COAST RECYCLING, INC.

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

March 15, 1996

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

RECEIVED

MAR 19 1996

BUREAU OF
AIR REGULATION

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

Dear Mr. Linero:

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

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

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

Mr. A. A. Linero, P.E.

March 15, 1996

Page 2

- 2) Attached is a table summarizing Gulf Coast's Annual Operating Reports which have been submitted to the Florida DEP. Total Suspended Particulates (TSP) emissions for the most representative two-year period (1984-85) are 9.30 and 9.72 tons/year, respectively. The average for this two-year period is 9.51 tons/year which was used as the "baseline" for PSD applicability determination. To reiterate this determination, PSD is not applicable for TSP due to the difference between the requested (and currently permitted) rate of 20.4 tons/yr and the baseline rate of 9.51 tons/yr being less than the 15 tons/yr PSD significance level ($20.4 - 9.51 = 10.89$) which would even apply now for PM_{10} . The significance level for TSP in effect in the mid-eighties was 25 tons/yr.
- 3) In a memorandum dated January 22, 1996 from John Seitz, Director of the EPA OAQPS, and Robert Van Heuvelen, Director of the EPA Office of Regulatory Enforcement, to the EPA regional offices, an interim policy was released on federal enforceability of limitations on potential to emit (PTE). A copy is attached. This interim policy will remain in place until January 1997 or longer to coincide with the promulgation of revised regulations. The policy was initiated by two recent court decisions which involved federal enforceability and PTE issues. In Chemical Manufacturers Association v. EPA the court remanded the potential to emit definition in the PSD and NSR regulations to EPA. The court also vacated the federal enforceability requirement of the PTE definitions in the PSD and NSR regulations. Among the effects these decisions have on the PSD and NSR programs is that "because the court vacated the rules, the requirements in the nationwide rules for PSD and major source NSR concerning federal enforceability are not in effect". The memo also states that "...certain netting transactions involving PTE limits under new source review programs may now take place without federal enforceability".

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

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

Mr. A. A. Linero, P.E.

March 15, 1996

Page 3

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

Sincerely,

GULF COAST RECYCLING, INC.

Willis M. Kitchen

Willis M. Kitchen
President

WMK:lgc

Attachments

460.2.1\460-96\0315LINE.23L

cc: B. Thomas, SWD
L. DeKen, EPC HC
J. Harper, EPA
J. Bunyak, NPS
L. Carlson, Lake Eng.
J. Reynolds, BAR

TABLE 4

**GULF COAST RECYCLING
ANNUAL OPERATING REPORT SUMMARY**

| YEAR | HOUR/YR | PRODUCTION TPY | COKE TPY | TSP LBS/HR | TSP TPY | LEAD LBS/HR | LEAD TPY | SO2 LBS/HR | SO2 TPY |
|------|---------|-------------------|----------|------------|---------|----------------|-------------|---------------|---------|
| 1978 | 6,000 | 8,750 | 1,800 | 2,462 | 7,386 | | | 175 | 525 |
| 1979 | No AOR | | | | | | | | |
| 1980 | 5,208 | 11,636 | 1,600 | 1,260 | 3,30 | | | 318 | 800 |
| 1981 | 6,384 | 12,500 | 2,065 | 1,192 | 3.80 | | | 110 | 351 |
| 1982 | 6,600 | 12,380 | 2,500 | 0.557 | 1.84 | | | 74 | 244 |
| 1983 | 7,272 | 14,995 | | 2.559 | 9.30 | 7.51 | | 374 | 1,360 |
| 1984 | 7,560 | 15,750 | 2,395 | 2.559 | 9.72 | 1.7600 | 6.6900 | 374 | 1,421 |
| 1985 | 7,476 | No Data | No Data | 2.076 | 7.76 | 1.1584 | 4.3300 | 312 | 1,168 |
| 1986 | 7,610 | 16,658 | 2,690 | 0.450 | 1.71 | 0.0800 | 0.0304 | 92 | 350 |
| 1987 | 7,795 | 24,079 | 3,941 | 0.590 | 2.30 | 0.0094 | 0.0370 | 353 | 1,377 |
| 1988 | 7,795 | 21,489 | 3,487 | 1.000 | 3.90 | 0.0900 | 0.3500 | 377 | 1,470 |
| 1989 | 7,795 | 23,350 | 3,428 | 0.681 | 2.65 | 0.0421 | 0.1600 | 339 | 1,377 |
| 1990 | 7,795 | 23,494 | 3,370 | 0.709 | 2.77 | 0.0790 | 0.0800 | 326 | 1,271 |

hrs lbs/hr TPY

6405 1.50 275.4

7711 300 1,156.1

January 22, 1996

MEMORANDUM

SUBJECT: Release of Interim Policy on Federal Enforceability of
Limitations on Potential to Emit

FROM: John S. Seitz, Director
Office of Air Quality Planning and Standards (MD-10)
Office of Air and Radiation

Robert I. Van Heuvelen, Director
Office of Regulatory Enforcement (2241A)
Office of Enforcement and Compliance Assurance

TO: Regional Office Addressees (see below):

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

The Court Decisions

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

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

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

Summary of Immediate Impacts of the Court Decisions

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

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

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

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

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

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

Distribution/Further Information

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

Attachment

Addressees:

Director, Office of Ecosystem Protection, Region I
Director, Air and Waste Management Division, Region II
Director, Air, Radiation, and Toxics Division, Region
III
Director, Air, Pesticides, and Toxics Management
Division, Region IV
Director, Air and Radiation Division, Region V
Director, Multimedia Planning and Permitting Division,
Region VI
Director, Air, RCRA, and TSCA Division, Region VII
Assistant Regional Administrator, Office of Pollution
Prevention, State and Tribal Assistance, Region VIII
Director, Air and Toxics Division, Region IX
Director, Office of Air, Region X

Regional Counsels, Regions I-X

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

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

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

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

Background

Several important Clean Air Act programs apply to only major sources, i.e., those that "emit or have the potential to emit" amounts exceeding major source thresholds listed in the Act. The EPA has promulgated regulations defining the term "potential to emit" for most of these programs. In particular, five sets of regulations are in place implementing the major source prevention of significant deterioration (PSD) and nonattainment area new source review (NSR) permitting programs (40 CFR 51.166, 40 CFR 52.21, 40 CFR 51.165, Appendix S of 40 CFR Part 51, and 40 CFR 52.24). Regulations governing approvability of state operating permit programs under Title V of the CAA are contained in 40 CFR Part 70, and EPA has proposed regulations implementing a federal operating permits program that are to be promulgated at 40 CFR Part 71. Regulations implementing the requirements of section 112 of the Act related to major sources of hazardous air pollutants are contained in 40 CFR Part 63, subpart A.

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

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

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

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

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

Plans for Rulemaking Amendments

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

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

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

Effects on PSD/NSR

EPA interprets the court's decision to vacate the PSD/NSR federal enforceability requirement in the Chemical Manufacturers case as causing an immediate change in how EPA regulations should be read, although EPA expects that the effect of this change will be limited. Specifically, provisions of the definitions of "potential to emit" and related definitions requiring that physical or operational changes or limitations be "federally enforceable" to be taken into account in determining PSD/NSR applicability, the term "federally enforceable" should now be read to mean "federally enforceable or legally and practicably enforceable by a state or local air pollution control agency."¹ For the reasons discussed below, however, the practical effects of the vacatur will be limited during the period prior to

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

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

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

²The situation is somewhat different in the several states lacking approved PSD programs, which are governed instead by the federal PSD program at 40 CFR § 52.21. (In most instances, these states have been delegated authority to issue PSD permits under the federal program pursuant to § 52.21(u).) Since these states do not have an EPA-approved PSD program, their SIPs presumably also lack state rules containing a blanket requirement that new or modified sources use only federally enforceable limits on PTE when seeking synthetic minor status to avoid PSD. Rather, sources in these states have been subject to the federal enforceability requirements of § 52.21. As noted above, Chemical Manufacturers vacated the requirements in § 52.21 that physical or operational changes be "federally enforceable" to be taken into account in determining the applicability of PSD to a proposed new source or modification. Accordingly, in states governed by § 52.21, a limit that is either "federally enforceable or legally and practicably enforceable by a state or local air pollution control agency" may now be used in determining PSD applicability in some circumstances. The effect of the vacatur in these states is limited, however, because as discussed below, new and modified sources in these states are still subject to the requirement to obtain federally enforceable minor source permits.

Second, a new or modified source that seeks to lawfully avoid compliance with the "major" source requirements of either PSD or nonattainment NSR by limiting its potential to emit to achieve synthetic minor status must still obtain a general or "minor" NSR preconstruction permit under section 110(a)(2)(C) of the Act and 40 C.F.R. § 51.160-164. Every SIP contains a minor NSR program that applies generally to new or modified sources of air pollutants, without regard to whether those sources are "major." Permits under such programs are, like all other SIP measures, federally enforceable. See CAA section 113(b)(1); 40 CFR § 52.23.³ The requirement under section 110(a)(2)(C) to obtain a federally enforceable minor NSR permit was not at issue in the Chemical Manufacturers case, and is unaffected by the court's ruling.

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

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

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

The principal immediate impact of the vacatur of the PSD/NSR federal enforceability regulations likely will occur in cases involving "netting" exercises at existing sources, where a source seeks to internally offset an emissions increase at a new or modified emissions unit by installing pollution controls or accepting operational limitations at another unit within the plant. For the reasons discussed above, in such cases the new or modified unit would still need to obtain a federally enforceable minor NSR permit. In contrast, the vacatur ordered by the court may allow the unit that is limiting its emissions to rely in some circumstances on controls that are legally and practicably enforceable by the state.⁴ Note, however, that under the terms

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

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

Effects on Section 112 and Title V

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

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

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

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

V, EPA's policy provides for the consideration of State-enforceable limits as a gap-filling measure during a transition period that extends until January 1997.⁵ Under this policy, for the 2-year transition period, restrictions contained in State permits issued to sources that actually emit more than 50 percent, but less than 100 percent, of a relevant major source threshold are treated by EPA as acceptable limits on potential to emit, provided: (a) the permit and the restriction in particular are enforceable as a practical matter; (b) the source owner submits a written certification to EPA accepting EPA and citizen enforcement. In light of National Mining, EPA believes that the certification requirement is no longer appropriate as part of this policy. Accordingly, EPA hereby amends the January 1995 transition policy by deleting the certification requirement.

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

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

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

al

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of an
Application for permit by:

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

Mr. Willis Kitchen
President
Gulf Coast Recycling, Inc.

REQUEST FOR EXTENSION OF TIME

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

RECEIVED

FEB 09 1996

BUREAU OF
AIR REGULATION

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

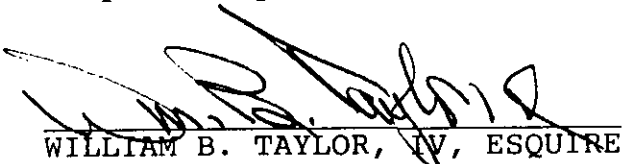
1. Gulf Coast previously requested an extension of time to file an administrative petition. On November 21, 1995 GCR received the latest letter of incompleteness from the DEP on this application. GCR responded to the comments by DEP and EPC and gathered the requested additional information. The response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

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

I HEREBY CERTIFY that the original of the foregoing has been

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

Respectfully submitted,



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.



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

February 8, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

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

Dear Mr. Kitchen:

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

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

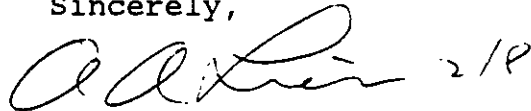
Mr. Willis M. Kitchen
February 8, 1996
Page Two

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

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

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

Sincerely,

Handwritten signature of A. A. Linero, dated 2/8.

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

AAL/JR

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

Florida Department of Environmental Protection

Memorandum

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. Kitchen, Pres
Gulf Coast Recycling
1901 North 66th St.
Jampa, FL 33619

4a. Article Number
2 127 633 161

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

5. Signature (Addressee)
[Signature]

6. Signature (Agent)
[Signature]

7. Date of Delivery
2-12-96

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

Thank you for using Return Receipt Service.

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

2 127 633 161



**Receipt for
Certified Mail**

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

| | | |
|---|-----------------|--|
| Ship to | Willis Kitchen | |
| Street and No. | Gulf Coast Recy | |
| P.O. State and ZIP Code | Jampa 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 | 2-8-96 | |
| | PSD-FI-215 | |

PS Form 3800, March 1993

COMMISSION

DOTTIE BERGER
PHYLLIS BUSANSKY
JOE CHILJIRA
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) 272-6900
FAX (813) 272-6157

AIR MANAGEMENT DIVISION
TELEPHONE (813) 272-5530

WASTE MANAGEMENT DIVISION
TELEPHONE (813) 272-5788

WETLANDS MANAGEMENT DIVISION
TELEPHONE (813) 272-7104

MEMORANDUM

DATE: February 7, 1996

TO: John Reynolds

FROM: Liz Deken *LD*

SUBJECT: Gulf Coast Recycling, Inc. - PSD Application
Incompletion Response

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

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



GULF COAST RECYCLING, INC.

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

January 10, 1996

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

RECEIVED

JAN 12 1996

BUREAU OF
AIR REGULATION

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

Dear Mr. Linero:

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

DEP Comments

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

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

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

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

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

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

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

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

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

Hillsborough County EPC Comments

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

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

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

AP-42 Factor

80 lbs SO₂/ton processed x 6.5 tons processed/hr = 520 lbs SO₂/hr
[520 lbs/hr - 175 lbs/hr (requested)] ÷ 520 lbs/hr = 66.4% reduction

Referenced Source Tests

111.4 lbs SO₂/ton produced (test avg.) x 0.6 ton Pb prod./ton processed* = 66.84 lbs SO₂ /ton processed

66.84 lbs SO₂/ton processed x 6.5 tons processed/hr = 434.46 lbs SO₂/hr
[434.46 lbs/hr - 175 lbs/hr (requested)] ÷ 434.46 lbs/hr = 59.7% reduction

* Note: The lead production factor of 0.6 ton/ton material processed is an average.

- 6) No additional information is requested. This issue will be addressed in Gulf Coast's Title V application, which is due in approximately 6 months.

- 7) No additional information is requested.
- 8) Gulf Coast is not required to be in compliance with the lead industry MACT until June 1997. Therefore, it is believed that it is not currently an applicable requirement. Gulf Coast has met its initial notification commitment which is not considered a compliance requirement. Gulf Coast's MACT compliance strategy will be addressed in Gulf Coast's Title V application. This was agreed to by Mr. John Reynolds of the DEP during a telephone conversation with Lake Engineering on November 29, 1995.

- 9a) Of the 23 lead-acid battery recycling facilities currently operating in the U. S., only nine have SO₂ scrubbers. In addition, of the eight blast furnace-only facilities, only one utilizes a SO₂ scrubber (see attached Table 4-1 from the Background Information Document). No facility currently operating uses any SO₂ control other than a scrubber or desulfurization, providing the requested reasonable assurance that the control technologies evaluated in the application (wet and dry scrubbing, and desulfurization) are the best available. As stated previously there are three facilities which utilize desulfurization as their only SO₂ "control".

The average cost effectiveness of each of the SO₂ control technologies presented were provided in the analysis. The results are: \$414/ton for dry scrubbing (pgs. 10-11), \$1,193/ton for wet scrubbing (pgs. 13-14), and \$240/ton for desulfurization (pg. 19).

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

Wet scrubbing: \$1,595,674/ton (assuming a one-ton annual reduction over dry scrubbing when in actuality they are assumed to have equal control efficiencies and, therefore, have the same annual reduction)

Dry scrubbing: \$901/ton

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

- 10) No additional information is requested.

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

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

Sincerely,

GULF COAST RECYCLING, INC.

Willis M. Kitchen

Willis M. Kitchen
President

WMK:lgc
Attachments

460.2.1

V460-96\0110LINE.23L

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

DEC 07 1995



M. A. INDUSTRIES, INC.

Quality Products Through Creative Research

Orig: GT
CC: WMK
LAK
JM

December 4, 1995

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

Dear George,

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

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

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

Best Regards,

M.A. INDUSTRIES, INC.
Engineering Division


Ronald R. Egan
Marketing Manager

FAXED ~~4 Dec 95~~

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

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

C-16

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

| Fac ID | Principal Bottleneck | Hours of Oper (hr/yr) | Actual Lead Prod Rate (Mg/yr) | Paste Desulf (Y/N) | No. Blast Furns | No. Reverb Furns | No. Rotary Furns | No. Elect Furns |
|--------|----------------------|-----------------------|-------------------------------|--------------------|-----------------|------------------|------------------|-----------------|
| 2 | | 8760 | 81588 | N | 4 | 0 | 0 | 0 |
| 3 | | 8232 | 124495 | Y | 1 | 1 | 0 | 0 |
| 4 | | ████████ | ████████ | Y | 0 | 1 | 0 | 0 |
| 5 | | 7800 | 19169 | N | 1 | 0 | 0 | 0 |
| 6 | | 8760 | 12649 | N | 2 | 0 | 0 | 0 |
| 8 | | ████████ | ████████ | Y | 1 | 1 | 0 | 0 |
| 9 | BLAST FURN | 8760 | 21778 | N | 1 | 0 | 0 | 0 |
| 10 | | ████████ | ████████ | Y | 0 | 1 | 0 | 1 |
| 12 | SCRAP AVAIL | 8064 | 6805 | N | 1 | 0 | 0 | 0 |
| 13 | | 8760 | 74807 | N | 2 | 1 | 0 | 0 |
| 14 | NONE | 8760 | 54432 | Y | 1 | 2 | 0 | 0 |
| 15 | | 8760 | 54431 | Y | 1 | 1 | 1 | 0 |
| 16 | | 8760 | 33112 | N | 1 | 0 | 0 | 0 |
| 17 | | ████████ | ████████ | N | 0 | 1 | 0 | 0 |
| 19 | | ████████ | ████████ | N | 0 | 0 | 2 | 0 |
| 20 | | 8760 | 12238 | Y | 0 | 0 | 1 | 0 |
| 22 | | 8760 | 60814 | N | 1 | 1 | 0 | 0 |
| 23 | | ████████ | ████████ | N | 2 | 2 | 0 | 0 |
| 25 | REFINING | 6720 | 16330 | N | 1 | 0 | 0 | 0 |
| 26 | BLAST | 8760 | 23592 | N | 1 | 1 | 0 | 0 |
| 27 | | ████████ | ████████ | N | 2 | 0 | 0 | 0 |
| 28 | | 8760 | 33995 | N | 1 | 1 | 0 | 0 |
| 29 | | 8760 | 17002 | N | 0 | 0 | 2 | 0 |

SO₂ Scrubber

Desulf. without Scrubber

C-17

Table 2.1
PSD APPLICABILITY FOR NEW BLAST FURNACE

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

| POLLUTANT | NEW FURNACE POTENTIAL EMISSIONS | OLD FURNACE ACTUAL EMISSIONS | POTENTIAL EMISSIONS INCREASE | PSD SIGNIFICANCE LEVEL | PSD TRIP? | EMISSION REDUCTION W/CONTROLS | PROPOSED ALLOWABLE EMISSIONS |
|-----------------|---------------------------------|------------------------------|------------------------------|------------------------|-----------------|-------------------------------|------------------------------|
| SO ₂ | 2,028.00 ¹ | 1,387.00 | 641.00 | 40 | YES | 1,345.50 | 682.50 ⁸ |
| Pb | 7.06 ² | 6.69 | 0.37 | 0.6 | NO | --- | 7.06 |
| PM | 20.4 ³ | 9.51 | 10.89 | 15 | NO | --- | 20.4 |
| CO | 2,664.95 ⁴ | 1,774.00 | 890.95 | 100 | YES | 2,398.46 ⁶ | 266.49 |
| NO _x | 7.72 ⁴ | 5.14 | 2.58 | 40 | NO | --- | 7.72 |
| VOCs | 129.04 ⁴ | 85.91 | 43.18 | 40 | NA ⁵ | 122.64 ⁷ | 6.40 |

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

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

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

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

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

| Facility ID | Furnace ID | Operating temperature (°C) | Residence time (seconds) |
|-------------|------------|----------------------------|--------------------------|
| 2 | 1 | 670 | N/A ^a |
| | 2 | 670 | N/A |
| | 3 | 670 | N/A |
| | 4 | 670 | N/A |
| 3 | 1 | 650 | N/A |
| 6 | 1 | 730 | 0.7 |
| | 2 | 730 | 0.7 |
| 8 | 1 | 650 | N/A |
| 12 | 1 | 870 | 1.5 |
| 13 | 1 | 590 | 2.5 |
| | 2 | 590 | 2.5 |
| 16 | 1 | 700 | 2.5 |
| 27 | 1 | 590 | N/A |
| 28 | 1 | 650 | 2.0 |

^a N/A = Residence time not available.

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

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

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

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

It is authorized companies and shall be used only for the purpose for which it was supplied. It shall not be copied, reproduced or otherwise used, nor shall such information be furnished in whole or in part to others except in accordance with the terms of any agreement under which it was supplied or with the prior written consent of Raytheon Engineers & Constructors and shall be returned upon request.

Raytheon Engineers & Constructors

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

SPECIFICATION INDEX

FOR

AFTERBURNER

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

GULF COAST RECYCLING

AFTERBURNER PROJECT

TAMPA, FLORIDA

| Interdiscipline Reviews | | | | | |
|-------------------------|-------|---------|--------|--------|--|
| Process | Mech. | Struct. | Elect. | Instr. | |
| | | | | | |

CERTIFIED

ENG. _____ DATE _____

_____ DATE _____

CLIENT _____ DATE _____

| ISSUE | DATE | DESCRIPTION | CHK D | APP'D |
|-------|----------|-------------|-------|-------|
| 1 | 12/15/95 | FOR COMMENT | | JWG |

| | | |
|------------|----|-------------------|
| SHEET 1 OF | 11 | SP-73910201-HF101 |
|------------|----|-------------------|

AFTERBURNERS

1.0 PROCESS DESCRIPTION

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

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

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

2.0 SCOPE OF WORK

2.1 The Afterburners shall be furnished by the Vendor as a complete integrated unit with all burner instrumentation and valves from the first (upstream) block valve. Shut-off valves to both burners (including main and pilot) shall also be included.

2.2 Automatic control of the unit shall be accomplished by a local control panel furnished by the vendor.

2.3 The control system shall be designed to comply with Factory Insurance Association, U.S.A., Standards.

2.4 The unit shall include, but not be limited to, the following:

2.4.1 Fuel Pressure Reducing Stations.

2.4.2 Fuel Pressure Switches shall be furnished in NEMA 4 enclosure cases with external adjustments.

2.4.3 Fuel Temperature Switches shall be furnished in NEMA 4 enclosure cases, capillary and bulb shall be stainless steel. Each switch shall be furnished with a stainless steel thermowell.

2.4.4 Main Fuel, Pilot and Vent Solenoid Valves shall be furnished with 120 volt A.C. molded coils in NEMA 4 housings. Solenoids shall be furnished complete with all accessory items; i.e., latches and end switches.

4.0 GENERAL

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

SPECIFICATION FOR AFTERBURNER

Service: Provide heat for oxidation of carbon monoxide in exhaust gases of a Secondary Lead Smelter.

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

GENERAL

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

OPERATING CONDITIONS

Heat Release: 3.75 MMBTU/Hr max (each burner)

Exhaust Gas to Afterburner Chamber: 32,511 ACFM
 565 °F (Design)
 1450 °F (Max)

Afterburner Chamber Operating Pressure: -2 to +2 in. W.G.

Fuel Gas: Natural Gas HV: 870 - 1000 BTU/Ft³

Burner Pressure: 16 in. WG (max)

Fuel For Pilot: Natural Gas

Fuel Supply Pressure: _____ psig

Plant Air: , _____ psig

Remarks: _____

MECHANICAL SPECIFICATIONS

Burner Turndown Ratio: 5:1

Pilot Burners: Required (X) Not Required ()

Ignitor: Required (X) Not Required ()

Flame Safeguard: Required (X) Not Required ()
Type: Ultraviolet Light

Pilot Flame Detector: Required (X) Not Required ()

Fuel/Air Control: Automatic (X) Manual ()

Insurance Regulations: FM () FIA ()

Remarks: _____

AFTERBURNER CHAMBER DATA (3)

Chamber Diameter: 120 inches ID Length: 19'-0"

Access Manhole: 9'-6" x 9'-0" door

Plate Material: _____ Thickness: _____

Refractory - Type _____

Burner Mounting: Wall mounted to combustion chamber (1)

Control Cabinet: Wall mounted

Testing -Type: NEMA 4

Remarks: (1) Vendor to recommend location for burners on afterburner chamber for optimum temperature control and destruction of CO.

(2) Vendor to estimate the CO destruction efficiency based on continuous operation of afterburner chamber at 1500 °F and stated dimensions and flow rates.

(3) Chamber supplied by others. See pages 7 & 8.

Raytheon
Engineers & Constructors

GENERAL
COMPUTATION
SHEET

CALCULATION SET NO.

REV.

COMP. BY

CHK'D. BY

PRELIM.

FINAL

VOID

JWG

DATE

12/14/95

DATE

PROJECT GULF COAST RECYCLING

SUBJECT AFTER BURNER CHAMBER

SHEET 7 OF 11

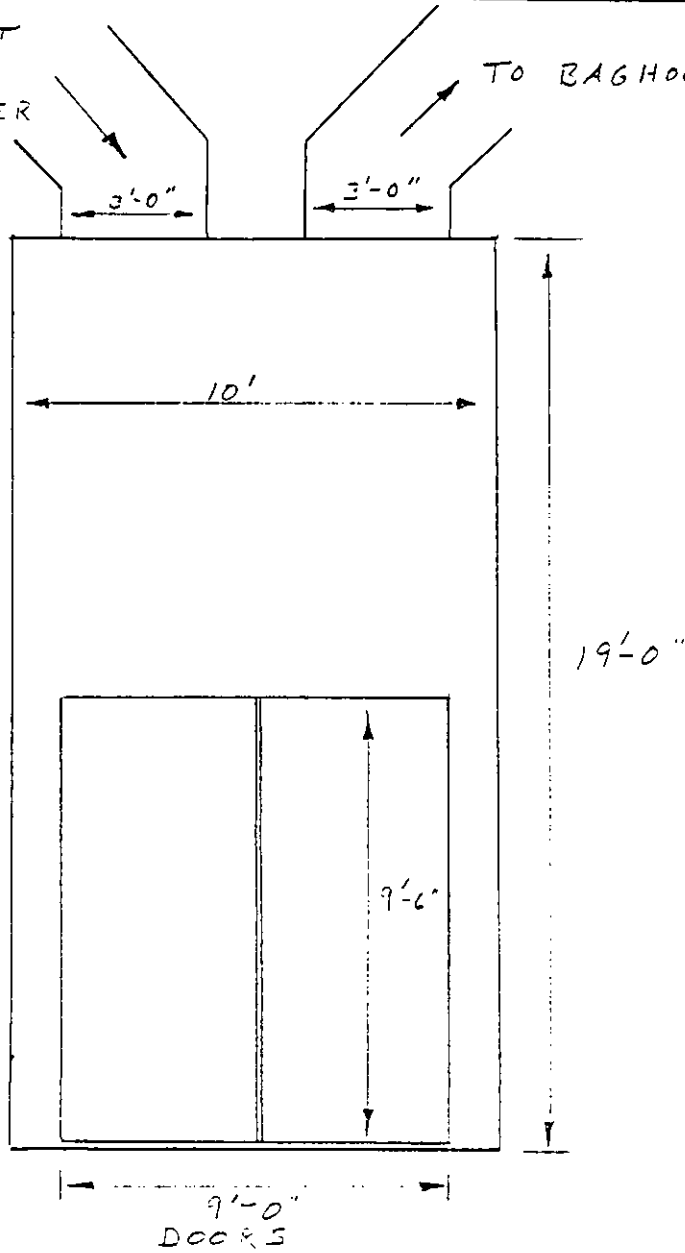
J.O. 73910.201

DATE

DATE

EXHAUST
FROM
SMELTER

TO BAGHOUSES



Raytheon
Engineers & Constructors

GENERAL
 COMPUTATION
 SHEET

CALCULATION SET NO.

REV.

COMP. BY
JW6
 DATE
12/14/95

CHK'D. BY
 ,
 DATE

PRELIM. FINAL VOID

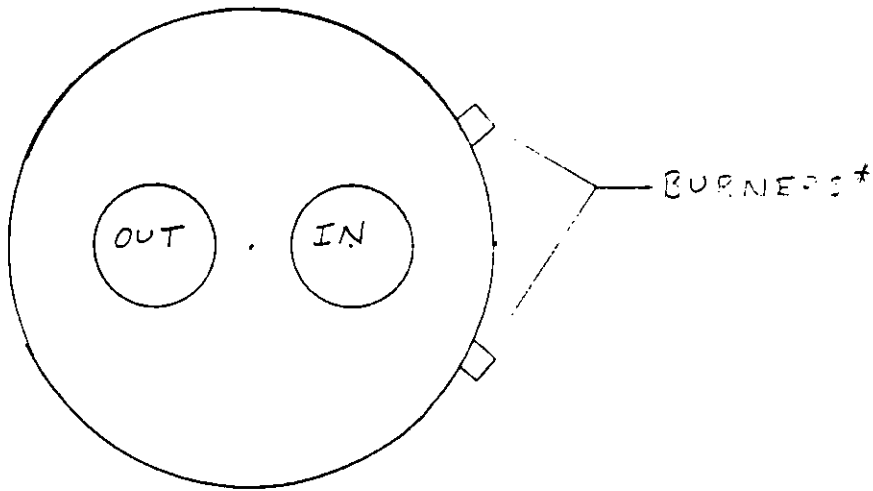
SHEET 8 OF 11

J.O. 73910.201

DATE

DATE

PROJECT GULF COAST REFINING
 SUBJECT AFTER BURNER CHAMBER



PLAN VIEW

* VENDOR TO SPECIFY LOCATION OF BURNERS FOR OPTIMUM PERFORMANCE.

FAN/BLOWER SPECIFICATION

| | | | |
|---------------------------------------|--|--|--|
| Client: <u>GULF COAST RECYCLING</u> | | Item No.: <u>PC-101 A/B</u> | |
| Unit: <u>LEAD SMELTER AFTERBURNER</u> | | Location: <u>TAMPA, FL</u> | |
| 1 | SERVICE: <u>AFTERBURNER COMBUSTION AIR FAN</u> | | NUMBER REQUIRED: <u>TWO (2)</u> |
| 2 | MANUFACTURER: | MODEL: | |
| 3 | OPERATING CONDITIONS Each Machine: | | |
| 4 | Fluid Handled: <u>AIR</u> | | |
| 5 | | | |
| 6 | Mol. wt.: <u>29</u> | | |
| 7 | | Units | Normal |
| 8 | Mass Flow | lbs/hr | Rated |
| 9 | Capacity | acfm | |
| 10 | Inlet Temperature | ° F | <u>95</u> |
| 11 | Inlet Pressure | inches W.C. | <u>ATM</u> |
| 12 | Discharge Pressure | inches W.C. | |
| 13 | Static Differential Pressure | inches W.C. | |
| 14 | Density | lbs/ cf | |
| 15 | Dewpoint | ° F | <u>85</u> |
| 16 | Dust Content | lbs/ cf | |
| 17 | | | |
| 18 | Location (Indoors/Outdoors): <u>INDOORS</u> | | Environment (Dusty, Fumes, etc.): <u>DUSTY</u> |
| 19 | Elevation: <u>SEA LEVEL</u> | | Atmospheric Pressure: |
| 20 | Ambient Temperature (° F): <u>95</u> | | Relative Humidity %: <u>85</u> |
| 21 | Electrical Area Classification: <u>NOT CLASSIFIED</u> | | Dust Characteristic: |
| 22 | Minimum Cold Start Temperature (° F): | | Number Starts/hour: <u>4</u> |
| 23 | Duty <input type="checkbox"/> Continuous <input checked="" type="checkbox"/> Intermittent: | | |
| 24 | MATERIALS OF CONSTRUCTION: | | |
| 25 | | Material | Thickness |
| 26 | Casing: | <u>CARBON STEEL</u> | Shaft: |
| 27 | Casing Liner: | | Shaft Sleeve: |
| 28 | Inlet Boxes: | | Shaft Seals: |
| 29 | Wheel/Impeller: | <u>CARBON STEEL</u> | Inlet Vanes/Damper: |
| 30 | Blades: | <u>CARBON STEEL</u> | Outlet Vanes/Damper: |
| 31 | Hub: | | Spray Nozzles: |
| 32 | Gaskets: | | Spray Piping: |
| 33 | Silencer: | | |
| 34 | RATED PERFORMANCE: | | |
| 35 | Proposal Curve Number: | Power Absorbed @ Fan/Blower Shaft Hp - Normal: | |
| 36 | Number Stages: | - Rated: | |
| 37 | Rev./minute: | - Maximum: | |
| 38 | Rated Capacity acfm: | Wheel Tip Speed (ft/minute): | |
| 39 | Rated Static Differential Pressure @ Rated Capacity (inches W.C.): | First Critical Speed (rpm): | |
| 40 | Maximum Rated Static Differential Pressure (inches W.C.): | Maximum Allowable Operating Speed (rpm): | |
| 41 | Fan/Blower Efficiency %: | Impeller/Blade Resonant Frequency (rpm): | |
| 42 | Inlet Velocity (ft/ min.): | Erase - Required/Not Required: | |
| 43 | Discharge Velocity (ft/ min.): | - Supplied By: | |
| 44 | Discharge Temperature (° F): | - Dimensions: | |
| 45 | | | |

RAYTHEON ENGINEERS & CONSTRUCTORS

ISSUE: 1

DATE: 12/15/95

Sht. 9 of 11

SP-73910201-45101

FAN/BLOWER SPECIFICATION

Client: *GULF COAST RECYCLING*

Item No.: *PB-101 A/B*

Unit: *LEAD SMELTER AFTERBURNER*

Location: *TAMPA, FL*

| MECHANICAL SPECIFICATION | | | | | | SCOPE OF SUPPLY | | |
|--------------------------|--|------|--------|--------|----------|--------------------------|--------------------------|--|
| 2 | Nozzles | Size | Rating | Facing | Location | Purchaser | Vendor | |
| 3 | Inlet | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Driver |
| 4 | Discharge | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Driver Slide Rails |
| 5 | Case Drain | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Gearbox |
| 6 | Spray Nozzle | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Gearbox or Fan Input Coupling |
| 7 | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Gearbox Output Coupling |
| 8 | Type (Centrifugal or Axial): | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Belt Drive |
| 9 | Construction (Spark Resistant &/or Gas Tight): | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Guards to OSHA Specifications |
| 10 | Discharge Designation : | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Turning Gear |
| 11 | Drive Arrangement : | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Locking Gear |
| 12 | Standard Motor Position : | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Anti-vibration Mounting |
| 13 | Blade Shape (Straight Radial, Forward Curved, Backward Curved or Airfoil): | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Baseplate |
| 14 | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Soleplate |
| 15 | Wheel Fabrication : | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Anchor Bolts |
| 16 | Wheel Diameter & Tip Width : | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Inlet Screen |
| 17 | Number of Blades: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Inlet Filter |
| 18 | Attachment of Wheel to Shaft: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Inlet Silencer |
| 19 | Shaft Diameter mm - @ Bearings: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Inlet Louvers |
| 20 | - @ Wheel Hub: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Inlet Damper |
| 21 | Attachment Coupling to Shaft (Tapered or Cylindrical): | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Discharge Louvers |
| 22 | Casing Split (Axial or Radial): | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Discharge Damper |
| 23 | Casing Access Doors Number / Size : | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Inlet Louvers or Damper Operator |
| 24 | Type Seal - Shaft to Casing: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Outlet Louvers or Damper Operator |
| 25 | Radial Bearing - Type / Size: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Inlet Guide Vanes |
| 26 | - Manufacturer: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Inlet Guide Vanes Actuator |
| 27 | Thrust Bearing - Type / Size: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Inlet Bellows |
| 28 | - Manufacturer: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Discharge Bellows |
| 29 | Bearing Lubrication: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Ebase Design |
| 30 | Bearing Support (Bracket or Pedestal): | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Ebase (If Required) |
| 31 | Bearing Cooling (Air or Water)/Flow: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Discharge Silencer |
| 32 | Heat Slinger/Shield Furnished: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Spray Nozzles |
| 33 | Balancing of Rotor Assembly (Static and/or Dynamic): | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Spray Nozzle Piping |
| 34 | Rotor Inertia : | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Acoustic Treatment |
| 35 | Inlet Flow Control Operator Type: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Insulation Clips |
| 36 | Outlet Flow Control Operator Type: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Insulation |
| 37 | Number Spray Nozzles: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Inlet & Discharge Gaskets |
| 38 | Painting: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Vibration Probes |
| 39 | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Vibration Proximeters |
| 40 | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Vibration Monitor System |
| 41 | Utilities Available and Required: | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Lubrication System - Vendor Standard |
| 42 | <i>460V, 3 PHASE</i> | | | | | <input type="checkbox"/> | <input type="checkbox"/> | RTD Temperature Detector on each Bearing |
| 43 | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | Grounding Lugs |
| 44 | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | |
| 45 | | | | | | <input type="checkbox"/> | <input type="checkbox"/> | |

RAYTHEON ENGINEERS & CONSTRUCTORS

ISSUE: *1*

DATE: *10/15/95* Sht. *10* of *11*

SP-70010701-48-1

FAN/BLOWER SPECIFICATION

| | |
|--|-----------------------------|
| Client: <u>GULF COAST RECYCLING</u> | Item No.: <u>PB-101 A/B</u> |
| Unit: <u>LEAD SMELTER AFTER BURNER</u> | Location: <u>TAMPA, FL</u> |

| | | |
|---|--|-----------------|
| 1 | SHOP TESTS | INSTRUMENTATION |
| 2 | Test Witnessed | Test Code |
| 3 | <input type="checkbox"/> <input type="checkbox"/> Performance | |
| 4 | <input type="checkbox"/> <input type="checkbox"/> Mechanical Run | |
| 5 | <input type="checkbox"/> <input type="checkbox"/> Leak Test | |
| 6 | <input type="checkbox"/> <input type="checkbox"/> Shop Inspection | |
| 7 | <input type="checkbox"/> <input type="checkbox"/> Dismantle and inspect after Test | |
| 8 | <input type="checkbox"/> <input type="checkbox"/> Balance | |

9 DRIVER SPECIFICATIONS

| | | |
|----|---------------------|--|
| 10 | Drive Efficiency %: | Driver Side Base Type: Heavy Duty with Jack Screws |
| 11 | MOTOR | Mfg.: Type: |
| 12 | | kW: RPM: |
| 13 | | Enclosure: Volts/Phase/Hertz: |
| 14 | | Insulation Class / Service Factor: Frame Size: |
| 15 | | Supplied by: Mounted By: |
| 16 | COUPLINGS | Gearbox or Fan Input - Mfr. & Size: - Type: |
| 17 | | Gearbox Output - Mfr. & Size: - Type: |
| 18 | | Motor Half Coupling Mounted By: Gearbox or Fan Half Coupling Mounted By: |
| 19 | | |
| 20 | GEARBOX | Manufacturer: Type: |
| 21 | | Size: Ratio / Output RPM: |
| 22 | | Class: Service Factor: |
| 23 | | Casing Material: Type of Base: |
| 24 | | Lubricant Type: Quantity / First Filled By: |
| 25 | V-BELT DRIVE | Section: No. of Belts: |
| 26 | | Service Factor: Anti-static (Yes/No): |
| 27 | | Pitch Dia. - Drive Pulley: - Driven Pulley: |

28 Guard - Type: Location:

29 SHIPPING AND INSTALLATION DATA

| | | |
|----|---------------------------|-----------------------|
| 30 | Net Weight : | Operating Weight : |
| 31 | Shipping Weight : | Shipping Volume : |
| 32 | Weight of Heaviest Lift : | Number of Components: |

33 REFERENCE SPECIFICATIONS, DRAWINGS AND DESIGN CODES

- 34 Painting:
- 35 Electric Motors:
- 36 Noise Abatement:
- 37 Gearbox:
- 38 Other:

39 REMARKS

- 40 1. Vendor shall complete ALL data on this form and return copies of the completed form with the Vendor Documents.
- 41 2. The fan/blower shall meet the requirements of Air Moving and Conditioning Association (AMCA).
- 42 3. Vendor shall ensure equipment complies with U.S. Department of Labor Occupational Safety and Health Administration Standards, Part 1910. Any exceptions shall be clearly stated.
- 43 4. The fan/blower shall be fully assembled, balanced and tested before shipment.
- 44 5. Drains shall be located in low points of the casing.
- 45 6. Vendor shall state in his quotation any exceptions to this specification and all referenced specifications.

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

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

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

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

^a Rounded to the nearest 10,000 Mg.

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