Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

October 31, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jack B. Prescott, General Manager
Stone Container Corporation
One Everitt Avenue
Panama City, Florida 32402

Re: Final request for Additional Information
DEP File No. 0050009-005-AC (PSD-FL-288)

Dear Mr. Prescott:

On April 10, 2000 the Department received your application for an increase in the pulp production at your Panama City Mill in Bay County. An initial request for additional information was sent on May 9, 2000, to which a response was received on June 15, 2000. On July 10, 2000 the Department requested submittal of additional information to process the referenced application request. To-date we have not received information on further development on this project and the additional information that we requested. Please note that per Rule 62-4.055(1), Florida Administrative Code (F.A.C.):

> *"The applicant shall have ninety days after the Department mails a timely request for additional information to submit that information to the Department. If an applicant requires more than ninety days in which to respond to a request for additional information, the applicant may notify the Department in writing of the circumstances, at which time the application shall be held in active status for one additional period of up to ninety days. Additional extensions shall be granted for good cause shown by the applicant. A showing that the applicant is making a diligent effort to obtain the requested information shall constitute good cause. Failure of an applicant to provide the timely requested information by the applicable date shall result in denial of the application."*

More than 90 days have transpired since our request for additional information. The nature of the information is such that a diligent effort would have yielded it by now. Please provide the requested information by November 30, 2000 or show good cause that an extension is required.

If you have any questions regarding this matter, please call me at 850/921-9528.

Sincerely,

Syed Arif, P.E.
New Source Review Section

Sa/a

cc: Sandra Veazey, DEP/NWD
Gregg Worley, EPA
John Bunyak, NPS
David Buff, P.E., Golder Associates Inc.

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
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1. Article Addressed to:

Mr. Jack B. Prescott, Gen. Mgr.
Stone Container Corp.
One Everitt Ave.
Panama City, Fl 32402

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C. Signature
X [signature] ☐ Agent ☐ Addressee

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Jack Prescott
Street, Apt. No.; or PO Box No.
One Everitt Ave
City, State, ZIP+4
Panama City Fl 32402

PS Form 3800, June 1999 See Reverse for Instructions

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Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

July 10, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jack B. Prescott, General Manager
Stone Container Corporation
One Everitt Avenue
Panama City, Florida 32402

Re: DEP File No. 0050009-005-AC (PSD-FL-288)
Panama City Mill
Pulp Production Increase

Dear Mr. Prescott:

The Department has received the revised ambient impact analysis and the modeling data by electronic transmission on June 15, 2000. The Department also received the initial incompleteness responses for an increase in the pulp production from 668,850 tons per year (TPY) ADUP to 781,000 TPY ADUP at the above referenced facility in Bay County. Based on our review of the proposed project, we have determined that the following additional information is needed in order to continue processing this application package:

1. The application does not include a significant impact analysis for each pollutant that is subject to PSD review. The significant impact area should include all locations where the increase in the potential emissions of a criteria pollutant as a result of the proposed modification will cause a significant impact. If no significant impact analysis is conducted, it will be assumed that the radius of the significant impact area is 50 km.
2. The application does not address pre-construction monitoring. A pre-construction monitoring analysis should be conducted, and the results should be compared to the appropriate *de minimis* levels.
3. The receptors used to model impacts at the site boundary are not spaced at 100 m. Please re-evaluate impacts at the site boundary by using a fence line receptor network that has a 100 m resolution.
4. In the application, it is assumed that all land enclosed by the site boundary is non-ambient air. However, if there is no physical barrier about this property, the assumption is not valid. Please confirm the existence of a physical barrier that prevents public access onto the land that is enclosed by the site boundary that was utilized in the modeling.

5. There is an inconsistency when comparing maximum emission values presented in Table 2-1 of Section 2 with Tables A-2b and A-3b of Appendix A. As a result, it appears that Table 2-1 does not contain the maximum emissions associated with PM_{10}.

6. The long term NO_x emissions associated with 1988 Baseline values were not provided for Power Boilers No. 4 and No. 6 in Table 2-2 of Section 2. Please provide a reason for these missing values.

7. Please provide an analysis of worst case impact scenarios for each criteria pollutant subject to PSD review based upon fuel, load, and averaging time dependencies. In the application, three SO_2 operational scenarios were modeled to present the worst ambient impacts from the operation of the facility. These same scenarios appear to have been used to represent the worst case scenarios for NO_x, PM_{10}, and CO impacts. However, a load dependent analysis that shows the variations in stack exit temperature and exit velocity must be included for each pollutant in order to properly identify the operational scenarios that produce the maximum impacts for each pollutant.

8. To address compliance with the NAAQS, ambient background concentrations must be added to the maximum modeled values. In this application, monitored values were selected from surrounding regions and were considered to be representative of the air quality in Panama City. However, annual averages of the monitored values were inappropriately used for the evaluation of the short term standards for PM_{10} and SO_2. Please re-evaluate the NAAQS analysis for SO_2 and PM_{10} by using the 2nd highest monitored value for each appropriate short term averaging period observed at each monitor.

9. The justification for the use of the non-guideline ISC-PRIME model was provided in the application. However, the comparison between ISCST3 and ISC-PRIME models in Table 5-8 provides unexpected results. Although is expected that the concentrations from the two models will differ in the near field, the maximum concentrations from the over 90 km distance Class I areas should be nearly equivalent. Please provide the location (e.g., distances) of the maximum concentrations provided in this table.

10. The following comments are concerned with the emission inventory used in the NAAQS and PSD increment compliance assessment.

    a) Please prepare a CO emission inventory for the NAAQS compliance analysis. The inclusion of only monitored background data does not sufficiently demonstrate compliance with the NAAQS.

    b) Please review the emission inventory for all pollutants to ensure that all significant sources are included. In the application, it appears that sources beyond 70 km were eliminated without consideration of emission magnitude. Large sources beyond this distance that could have a significant impact in the significant impact area of the facility should be included.

    c) In the selection of emission sources for Class I impact assessments, the area about the Class I area (e.g. 100 km) should be considered.

d) Tables 4-3, 4-5, and 4-7 of Section 4 provide the emissions inventories for SO_2, PM_{10}, and NO_x, respectively. These tables contain the same companies but the individual emission points identified for each company in Table 4-3 does not appear in the subsequent tables. For example, it is expected that a boiler emitting SO_2 in Table 4-3 would also emit PM_{10} and NO_x. Also, Power Boiler #7 for Florida Coast Paper was a PSD source for Tables 4-3 and 4-5 but not for 4-7. The differences between these tables should be explained.

e) Individual stacks from certain emission sources were combined for the modeling submitted for this application. Given the importance of the location of sources within 5 km of the site, it is recommended that these sources not be combined.

11. Please submit the permitting history along with the appropriate permits for the recovery boilers and the smelt dissolving tanks. This should include construction permits and operating permits for these units.

We have not yet received approval concerning the ISC-PRIME model from the EPA. We are also awaiting any incompleteness comments concerning this project from EPA. Their comments will be forwarded to you as soon as we receive them.

The Department will resume processing this application after receipt of the requested information. If you have any questions regarding this matter, please call Syed Arif, P.E. at (850) 921-9528 or Chris Carlson at (850) 921-9537.

Sincerely,

7/10

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

AAL/sa

Enclosure

cc: Gregg Worley, EPA
John Bunyak, NPS
Ellen Porter, USF&WS
Ed Middleswart, P.E., DEP-NWD
Bruce Mitchell, DEP-BAR
David A. Buff, P.E., Golder Associates Inc.

SENDER: *COMPLETE THIS SECTION*

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1. Article Addressed to:

Mr. Jack B. Prescott
General Manager
Stone Container Corporation
One Everitt Avenue
Panama City, FL 32402

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* B. Date of Delivery 7/12/00

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X Deni R Clay ☐ Agent ☐ Addressee

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Post Office, State, & ZIP Code Panama City, FL 32402	
Postage	$
Certified Fee	
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Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date 0050009-005-AC PSJ-FL-288 Mailed: 7-10-00	

PS Form **3800**, April 1995

ATTACHMENT B

PCP EXCLUSION FOR MACT CONTROL PROJECTS

The applicant believes that the PCP exclusion is available for collateral pollutants generated when burning condensate stripper off-gases (SOG), or other HAP gases containing TRS, ammonia, and other compounds. Florida Administrative Code (F.A.C.), Rule 62-212.400(2)(a)2, Pollution Control Project Exemptions, reads as follows:

> "A significant net increase in the actual emissions of a collateral pollutant that would occur solely as a result of a project undertaken for the purpose of complying with the hazardous air pollutant emission reduction requirements of 40 CFR Part 63, Subpart S, adopted and incorporated by reference at Rule 62-204.800, F.A.C, shall not be subject of the preconstruction review requirements of this rule, provided...."

The wording "solely as a result of a project" is applicable to the Panama City cluster rule compliance project. The "project" includes burning SOG in the No. 3 Combination Boiler. The SOG necessarily contains total reduced sulfur (TRS) compounds and ammonia, which produce SO_2 and NO_x when combusted.

The Department's stated interpretation of the PCP exclusion is that any collateral PSD pollutants generated due to non-HAP pollutants, collected along with HAPs, are not covered under the PCP exclusion. The Department's stated interpretation of the PCP exclusion would render it ineffective. First, it would be extremely difficult to quantify the collateral emissions generated solely from HAPs collected in the stripper off-gases. The SOG contains a large percentage of methanol, but many other HAPs and non-HAPs are also present, as indicated by NCASI Technical Bulletin No. 701. These compounds include many organic species. The HAPs collected would have the potential to generate CO, VOC, and NO_x. But what amount the HAPs would contribute versus the non-HAPs contained in the same SOG is difficult, if not impossible, to determine.

Secondly, the purpose of a pollution control project exclusion is to exempt mandated projects from PSD review that are overall environmentally beneficial, but cause other PSD-regulated emissions. If such an exclusion is not provided for MACT compliance projects, the applicant is faced with not only complying with the MACT rule, but has the added burden of being subject to PSD, and the associated BACT review and other PSD requirements. This is contrary to EPA's stated intent in when it promulgated the MACT I rule.

In the preamble to the final MACT rule for the pulp and paper industry, EPA states (Federal Register, April 15, 1998, pages 18531-18533):

> "To comply with the MACT portion of the pulp and paper cluster rule, mills will route vent gases from specified pulping and condensate emission points to a combustion

control device for destruction. The incineration of these gases at kraft mills has the potential to generate sulfur dioxide and, to a lesser extent, nitrogen oxides."

This clearly indicates that EPA recognized that SO_2 emissions due to TRS compounds in the HAP-containing gas stream would occur, and that NO_x emissions would also be generated. EPA refers to the John S. Seitz memo of July 1, 1994 in its discussion, and states that in this memo EPA specifically identified the combustion of organic toxic pollutants as an example of an add-on control that could be considered a PCP. The preamble states:

> "EPA considers that combustion for the control of HAP emissions from pulping systems and condensate control systems to be a PCP, because the combustion controls are being installed to comply with the MACT and will reduce emissions of hazardous air pollutants. EPA also considers the reduction of these pollutants to represent an environmental benefit. EPA recognizes that the incidental formation of SO_2 and NO_x due to the destruction of HAPs will occur."

The Department adopted the rule allowing the PCP exemption to be applicable to the pulp and paper industry expressly for the purpose of expediting permitting of MACT compliance projects at DEP. The purpose was also to avoid the complex issues being raised in the processing of this permit for SCC Panama City. Based on the Florida rule wording, and EPA's stated purpose, the PCP should be granted for the SCC Panama City MACT control project.

NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Jack B. Prescott
General Manager
Stone Container Corporation
One Everitt Ave
Panama City FL 32402

FINAL Permit No.: 0050009-002-AV
Panama City Plant

_____/

Enclosed is FINAL Permit Number 0050009-002-AV for the operation of the Panama City Plant located at One Everitt Avenue, Panama City, Bay County, issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order (permit) has the right to seek judicial review of it under Section 120.68 of the Florida Statutes, by the filing of a Notice of Appeal under Rule 9.110 of the Florida Rules of Appellate Procedure, with the clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within thirty days from the date this order is filed with the clerk of the permitting authority.

Executed in Pensacola, Florida.

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

_____
Ed K. Middleswart, P.E.
Air Program Administrator
Northwest District

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on _____ to the person(s) listed or as otherwise noted:

Mr. Jack B. Prescott, Stone Container Corp.*
Mr. Scott Sheplak, P.E., FDEP Bureau of Air Regulation
Ms. Gracy Danois, USEPA, Region 4 (INTERNET E-mail Memorandum)

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency Clerk, receipt of which is hereby acknowledged.

_____ _____
(Clerk) (Date)

Stone Container Corporation
Panama City Mill
Facility ID No.: 0050009
Bay County

Initial Title V Air Operation Permit
FINAL Permit No.: 0050009-002-AV

Permitting and Compliance Authority:
Department of Environmental Protection
Northwest District Office
160 Governmental Center
Pensacola, FL 32501-5794
Telephone: 850/595-8364
Fax: 850/595-8096

[electronic file name: 0330042f.doc]

Table of Contents

Permittee:
Stone Container Corporation

FINAL Permit No.: 0050009-002-AV
Facility ID No.: 0050009
SIC Nos.: 26, 2611
Project: Initial Title V Air Operation Permit

This permit is for the operation of the Panama City Mill. This facility is located at One Everitt Avenue, Panama City, Bay County; UTM Coordinates: Zone 16, 632.8 km East and 3335.1 km North; Latitude: 30° 08' 30" North and Longitude: 85° 37' 25" West.

STATEMENT OF BASIS: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix SS-1, Stack Sampling Facilities (version dated 10/07/96)
Appendix TV-3, Title V Conditions (version dated 04/30/99)
Appendix U-1, List of Unregulated Emissions Units and/or Activities
Table 297.310-1, Calibration Schedule (version dated 10/07/96)
TRS Contingency Plan

Effective Date: June 28, 2000
Renewal Application Due Date: January 1, 2005
Expiration Date: June 28, 2005

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Ed K. Middleswart, P.E.
Air Program Administrator

EKM/rb

Section I. Facility Information.

Subsection A. Facility Description.

This facility is a Kraft pulp and paper mill that consists of major activities areas such as: wood handling facility, pulping, bleaching, chemical recovery, power house, paper machines, finishing/shipping/warehouse and associated processes and equipment.

Nos. 1 and 2 Recovery Boilers. Each recovery boiler is a direct contact recovery boiler with an electrostatic precipitator for particulate matter control. Each recovery boiler has a maximum heat input of 721 MMBtu/hr, which is equivalent to 123,700 pounds per hour of black liquor solids assuming 5,830 Btu/lb or black liquor solids. Black liquor either purchased or generated by the pulping process and containing between 5,200 and 6,300 Btu/lb is normally used for fuel but natural gas or No. 6 fuel oil with a maximum of 2.5% sulfur by weight may be used as a backup or supplemental fuel. Each boiler has a Koppers electrostatic precipitator with two sections of four fields each that controls particulate emissions. Total reduced sulfur emissions are monitored with a continuous emission monitor (CEM) system. These emissions units are regulated under Rule 62-296.404, F.A.C., Kraft Pulp Mills.

No. 3 Combination Boiler. The total maximum operational heat input of this emissions unit is 639 MMBtu/hr. The heat input is limited to 378 MMBtu/hr from fuel oil and 228 MMBtu/hr from carbonaceous fuels. This emissions unit may burn carbonaceous fuels (includes wood, bark and primary clarified wood fibers), natural gas and/or No. 2 or 6 fuel oil. Particulate emissions are controlled by a fly ash arrestor, model MTSA-380-9CVT, followed by a wet scrubber manufactured by FMC Link-Belt, model 200K dual-throat. Sulfur dioxide emissions are controlled by limiting the sulfur content of the fuel oil to a maximum of 2.4% by weight. This emissions unit is regulated under Rule 62-296.410, F.A.C., Carbonaceous Fuel Burning Equipment.

No. 4 Combination Boiler. The total maximum operational heat input of this emissions unit is 867 MMBtu/hr. The heat input is limited to 472 MMBtu/hr from fuel oil, 395 MMBtu/hr from coal and 273 MMBtu/hr from carbonaceous fuels. This emissions unit may burn carbonaceous fuels (includes wood, bark and primary clarified wood fibers), coal, natural gas and/or No. 2 or 6 fuel oil. Particulate emissions are controlled by a fly ash arrestor, model MTSA-380-9CVT, followed by a wet scrubber manufactured by FMC Link-Belt, model 200K dual-throat. Sulfur dioxide emissions are controlled when burning total reduced sulfur (TRS) gases and/or firing 100% fuel oil by maintaining a minimum pH of 8.0 in the wet scrubber (3-hour average). This boiler also serves as a backup control device for the non-condensable gases (NCG) from the Multiple-Effect Evaporator System and the Batch Digester System. TRS emissions are controlled by subjecting the TRS gases to a minimum of 1200°F for at least 0.5 seconds. This emissions unit is regulated under Rule 62-296.410, F.A.C., Carbonaceous Fuel Burning Equipment and Rule 62-296.404, F.A.C., Kraft Pulp Mills.

Nos. 1 and 2 Smelt Dissolving Tanks. The operating rate of each smelt dissolving tank is equal to the maximum allowed operating rate of each recovery boiler which is 123,700 pounds per hour of black liquor solids. The smelt is dissolved in weak wash to yield green liquor. Particulate emissions are controlled by demister pads manufactured by Munters Corporation. Total reduced sulfur emissions are controlled by weak wash sprays. The flow of the weak wash sprays is monitored as a surrogate compliance parameter. This emissions unit is regulated under Rule 62-296.404, F.A.C., Kraft Pulp Mills.

Lime Kiln. A natural gas or No. 6 fuel oil fired kiln with a maximum operating rate of 85,000 pounds per hour of lime mud. Maximum heat input to the kiln is 216 MMBtu per hour for natural gas and 139 MMBtu per hour for fuel oil. The kiln also serves as a control device for the NCG system. Particulate emissions are controlled by a venturi wet scrubber manufactured by Chemico, followed by a cyclone. Sulfur dioxide emissions are controlled by the sulfur content of the fuel oil (maximum of 2.5% by weight). Total reduced sulfur emissions are monitored with a CEM system. This emissions unit is regulated under Rule 62-296.404, F.A.C., Kraft Pulp Mills.

Methanol Storage Tank. A 38,500 gallon methanol vertical fixed roof storage tank with a flame arrestor. A nitrogen blanket flows over the methanol in the tank. The maximum annual throughput is 240,000 gallons per year. The storage tank and handling system are subject to recordkeeping and reporting requirements under the New Source Performance Standards (NSPS), 40 CFR 60, Subpart Kb.

Multiple Effect Evaporator (MEE) Systems. The evaporators are used to concentrate the weak black liquor prior to firing in the recovery furnaces. The total reduced sulfur emissions from the evaporators are collected by the NCG system and combusted in the lime kiln or No. 4 Bark Boiler. The maximum operating rate is 359,400 pounds of dry black liquor solids (BLS) per hour. Evaporator sets No. 1A, 2 and 3 process 208,000; 51,900; and 99,500 pounds of dry BLS/hr, respectively. This emissions unit is regulated under Rule 62-296.404, F.A.C., Kraft Pulp Mills.

Digester System. The digester system consists of twenty-two batch digesters, five blow tanks, one accumulator tank with both an upstream and downstream condenser, and a turpentine condensable system. The NCG handling system collects non-condensed gases containing total reduced sulfur compounds. Total reduced sulfur emissions are controlled by incineration in the lime kiln at 1200°F for at least 0.5 second, or in the No. 4 Bark Boiler as a backup. This emissions unit is regulated under Rule 62-296.404, F.A.C., and 40 CFR 60 Subpart BB, Kraft Pulp Mills.

Lime Slaker. Lime (CaO) from the lime kiln is added to green liquor (Na_2CO_3, Na_2S, and Na_2SO_4) in the slaker. The product of this reaction is white liquor (NaOH and Na_2S) used for cooking wood chips. Lime mud is formed as a byproduct which is recovered and regenerated to lime in the lime kiln. The maximum operating rate is 81.6 tons per hour of green liquor solids and lime (60.39 tph green liquor and 21.18 tph lime). Particulate emissions are controlled by a wet walled cyclone scrubber. This emissions unit is regulated under Rules 62-296.404, F.A.C., Kraft Pulp Mills and 62-296.320, F.A.C., General Pollutant Limiting Standards.

Woodyard. Wood chips are used as the raw material in the papermaking process and scrap wood and bark are used in steam generation. Roundwood (whole tree trunks) is received as either shortwood or longwood. Purchased hardwood or softwood chips are also received. Bark is a byproduct of log processing and some bark is also purchased. The chipping process begins by passing logs through a debarker to remove bark, which is collected and transferred via conveyors and hogged to obtain a desired size. After processing the bark, it is stored in piles, transferred to the bark bin, and then used as a fuel for the boilers at the facility. The logs are then chipped and the chips screened for proper size. Both purchased and manufactured chips are conveyed and stored in chip reclaimer storage piles. The facility has one softwood chip reclaimer and one hardwood reclaimer storage pile where chips are stored temporarily until needed by the facility. A single cyclone is associated with the bark transfer and conveying system, and used to pneumatically convey the bark. Conveyors are covered and roads are paved and maintained to minimize particulate entrainment. Four cyclones are used in the Screening Room to separate

pneumatically conveyed chips and fines from the conveying air stream. This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.

Also included in this permit are miscellaneous insignificant and unregulated emissions units and/or activities.

Based on the initial Title V permit application received June 17, 1996, this facility is a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U. ID No.	Brief Description
001	No. 1 Recovery Boiler
019	No. 2 Recovery Boiler
015	No. 3 Combination Boiler
016	No. 4 Combination Boiler
021	No. 1 Smelt Dissolving Tank
020	No. 2 Smelt Dissolving Tank
004	Lime Kiln
031	Methanol Storage Tank
026	Multiple Effect Evaporator Systems
027	Digester System, Non- Condensable Gas (NCG) Handling System
005	Lime Slaker
030	Woodyard
032	Unregulated Emissions Units (see Appendix U-1)

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:
Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History / ID Number Changes

These documents are on file with permitting authority:
Initial Title V Permit Application received June 17, 1996

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-3, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX TV-3, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}

2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C. and permit AC03-190964]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. Visible emissions limits for kraft pulp mill emissions units equipped with wet scrubbers shall be effective only if the visible emission measurement can be made without being substantially affected by moisture condensation.
[Rules 62-296.320(4)(b)1. & 4. and 62-296.404(2)(b), F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA).
a. As required by rule, inspection, or change in process the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
b. The owner or operator shall report to the Department of Community Affairs (DCA) within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the USEPA/Chemical Safety Hazard Investigation Board or the National Response Center under Section 112(r)(6).
c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1 annually, in accordance with Part IV, Chapter 252, F.S. and Rule 9G-21, F.A.C.

5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rule 62-213.440(1), F.A.C.]

6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), F.A.C.]

8. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include, but are not limited to, the application of water to stockpiles to control emissions and the implementation of good housekeeping practices.
[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application received June 17, 1996]

9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

10. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Northwest District office:

Department of Environmental Protection
Northwest District Office
160 Governmental Center
Pensacola, Florida 32501-5794
Telephone: 850/595-8364, press 7
Fax: 850/595-8096

11. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9055, Fax: 404/562-9164

12. The permittee shall comply with all the applicable standards and requirements of 40 CFR 63 Subpart S as specified in Attachment I (Amended Initial Notification Report, dated March 24, 2000), attached and incorporated by reference. The permittee shall comply with the reporting requirements of Subpart A of this part as specified in attachment Table 1. The Initial Notification Report shall be updated every two years and submitted to the Department for review.
[Rule 62-213.440(1), F.A.C., 40 CFR 63 Subpart S]

13. Statement of Compliance. The permittee shall submit a statement of compliance with all terms and conditions of the permit. {See condition 51., APPENDIX TV-3, TITLE V CONDITIONS}
[Rule 62-213.440(3), F.A.C.]

Section III. Emissions Units and Conditions.

Subsection A. This section addresses the following emissions units.

E.U. ID No.	Brief Description
001	No. 1 Direct Contact Recovery Boiler with an electrostatic precipitator for particulate control. TRS emissions are reduced by a two-stage heavy black liquor oxidation system.
019	No. 2 Direct Contact Recovery Boiler with an electrostatic precipitator for particulate control. TRS emissions are reduced by a two-stage heavy black liquor oxidation system.

This emissions unit is an existing source, not subject to NSPS or PSD.

The following specific conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

A.1. Capacity. The maximum allowable operating rate of each boiler is 123,700 pounds of black liquor solids fired per hour based on a 24-hour average, as measured from the black liquor storage tanks and prior to each recovery boiler. {Permitting note: The capacity limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.}
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

A.2. Methods of Operation - Fuels. The primary fuel shall be black liquor solids. Natural gas or No. 6 fuel oil with a maximum of 2.5% sulfur by weight may be used as a backup or supplemental fuel. Records of the sulfur content for each shipment of the fuel oil shall be maintained and available for inspection by the Department. The blending of fuel oil to achieve the sulfur standard is prohibited.
[Rules 62-4.160(2) and 62-213.440(1), F.A.C.]

A.3. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.4. Particulate Matter. Particulate matter emissions from each unit shall not exceed 3 pounds per 3000 pounds of black liquor solids burned or 112.5 pounds per hour, whichever is less. The rate of black liquor solids fired shall be monitored and recorded continuously, and the records made available for Department inspection. {Permitting Note: The averaging time for this condition is based on the run time of the specified test method.}
[Rule 62-296.404(2)(a), F.A.C., and operating permits AO03-222669 and AO03-240555]

A.5. Visible Emissions. Visible emissions shall not exceed 45% opacity (6-minute average), except for up to 60% for one 6-minute period during any hour.
[Rules 62-296.404(1)(a), and 62-296.404(1)(a)1., F.A.C.]

A.6. Total Reduced Sulfur. Total reduced sulfur emissions from each unit shall not exceed 17.5 ppm by volume on a dry basis at standard conditions corrected to 8% oxygen as a 12-hour average.
[Rule 62-296.404(3)(c)1.a., F.A.C.]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.7. Emissions Tests. See common condition number **K.1.**

A.8. Particulate Matter. The test method for particulate matter shall be EPA test method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rules 62-296.404(4)(a)2., and 62-297.401, F.A.C.]

A.9. Visible Emissions. The test method for visible emissions shall be EPA test method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rules 62-296.404(4)(a)1., and 62-297.401, F.A.C.]

A.10. Total Reduced Sulfur. The test method for total reduced sulfur shall be EPA test method 16, 16A or 16B incorporated and adopted by reference in Chapter 62-297, F.A.C. Testing is required only upon permit renewal.
[Rules 62-296.404(4)(a)3., and 62-297.401, F.A.C.]

Continuous Monitoring Requirements

A.11. Total Reduced Sulfur Continuous Monitoring. See common condition number **K.4.**

A.12. Quarterly Emission Reports. See common condition number **K.2.**

A.13. Determination of Process Variables. See common condition number **K.3.**

A.14. Excess Emissions. See common condition number **K.5.**

A.15. Periodic Monitoring. Until the requirements of MACT II are implemented, the permittee will maintain and monitor the existing opacity meters. Corrective action will be taken whenever the one hour average opacity exceeds 30%. Records of the opacity shall be maintained and available for inspection by the Department.
[Rule 62-213.440(4), F.A.C.]

Subsection B. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
015	No. 3 Combination Boiler with particulate matter emissions controlled by a venturi scrubber.

This emissions unit is an existing source, not subject to NSPS or PSD.

The following specific conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Capacity. The total maximum operational heat input of this emissions unit is 639 MMBtu/hr. The heat input shall not exceed 378 MMBtu/hr from fuel oil, 228 MMBtu/hr from carbonaceous fuels, or 33 MMBtu/hr from natural gas. {Permitting note: The capacity limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.}
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

B.2. Methods of Operation - Fuels. This emissions unit may burn carbonaceous fuels (includes wood, bark and primary clarified wood fibers), natural gas and No. 2 or 6 fuel oil (maximum of 2.4% sulfur by weight). Records of the sulfur content for each shipment of the fuel oil shall be maintained and available for inspection by the Department. The blending of fuel oil to achieve the sulfur standard is prohibited. [Note: carbonaceous fuel consumption rates shall be expressed on a dry solids basis]
[Rules 62-4.160(2) and 62-213.440(1), F.A.C.]

B.3. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.4. Particulate Matter. Particulate matter emissions shall not exceed 0.3 lb per MMBtu heat input from carbonaceous fuels or 0.1 lb per MMBtu heat input from natural gas and fuel oil. {Permitting Note: The averaging time for this condition is based on the run time of the specified test method.}
[Rule 62-296.410(1)(b)2., F.A.C.]

B.5. Visible Emissions. Visible emissions shall not exceed 30% opacity except for two minutes per hour of not more than 40% opacity.
[Rule 62-296.410(1)(b)1., F.A.C.]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.6. Emissions Tests. See common condition number **K.1.**

B.7. Particulate Matter. The test method for particulate matter shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rules 62-296.410(3)(b) and 62-297.401, F.A.C.]

B.8. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rules 62-296.410(3)(a) and 62-297.401, F.A.C.]

Monitoring of Operations

B.9. Determination of Process Variables. See common condition number **K.3.**

B.10. Excess Emissions. See common condition number **K.5.**

B.11. Periodic Monitoring. Within six months of the effective date of this permit, the permittee shall install the necessary equipment to monitor either scrubber flow or differential pressure. The set point for this parameter will be established during the annual testing and is subject to Department approval. Hourly monitoring records shall be maintained and available for inspection by the Department.
[Rule 62-213.440(4), F.A.C.]

Subsection C. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
016	No. 4 Combination Boiler with particulate matter emissions controlled by a wet scrubber. As a backup to the lime kiln, NCGs from the batch digesting system and multiple effects evaporator system are transported to this boiler for incineration of TRS.

This emissions unit is an existing source, not subject to NSPS or PSD.

The following specific conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

C.1. Capacity. The total maximum operational heat input of this emissions unit is 867 MMBtu/hr. The heat input shall not exceed 472 MMBtu/hr from fuel oil, 395 MMBtu/hr from coal, 273 MMBtu/hr from carbonaceous fuels, or 40 MMBtu/hr from natural gas. Capacity records shall be maintained and available for inspection by the Department.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. and construction permit AC03-190964]

C.2. Methods of Operation - Fuels. This emissions unit may burn carbonaceous fuels (includes wood, bark and primary clarified wood fibers), coal (maximum of 1.7% sulfur by weight), natural gas and No. 2 or 6 fuel oil (maximum of 2.4% sulfur by weight). Records of the sulfur content for each shipment of fuel oil and coal shall be maintained and available for inspection by the Department. The blending of fuel oil to achieve the sulfur standard is prohibited. [Note: carbonaceous fuel consumption rates shall be expressed on a dry solids basis]
[Rules 62-4.160(2) and 62-213.440(1), F.A.C.]

C.3. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.4. Particulate Matter. Particulate matter emissions shall not exceed 0.1 pound per MMBtu of heat input or 86.7 pounds per hour from fossil fuel firing, and 0.3 pound per MMBtu heat input or 81.9 pounds per hour from carbonaceous fuels. {Permitting Note: The averaging time for this condition is based on the run time of the specified test method.}
[Rule 62-296.410(1)(b)2, F.A.C.]

C.5. Sulfur Dioxide. Sulfur dioxide emissions shall not exceed 781 pounds per hour when incinerating TRS gases, and 772 pounds per hour when not incinerating TRS gases.
[Construction Permit AC03-190964]

C.6. Visible Emissions. Visible emissions shall not exceed 30% opacity except for two minutes period per hour of not more than 40% opacity.
[Rule 62-296.410(1)(b)1., F.A.C.]

C.7. Total Reduced Sulfur. Total reduced sulfur emissions shall not exceed 5 ppm by volume on a dry basis at standard conditions corrected to 10% oxygen as a 12 hour average.
[Rule 62-296.404(3)(f)1., F.A.C.]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.8. Emissions Tests. See common condition number **K.1.**

C.9. Particulate Matter. The test method for particulate matter shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rules 62-296.410(3)(b) and 62-297.401, F.A.C.]

C.10. Sulfur Dioxide. The test method for SO2 shall be EPA Method 6, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Construction Permit AC03-190964 and Rule 62-297.401, F.A.C.]

C.11. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rules 62-296.410(3)(a) and 62-297.401, F.A.C.]

C.12. Total Reduced Sulfur. The test method for total reduced sulfur shall be EPA Method 16, 16A or 16B incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rule 62-297.404(4)(b)3. and 62-297.401, F.A.C.]

Monitoring of Operations

C.13. Total Reduced Sulfur. When TRS gases are collected and transported to this boiler for incineration, the TRS gases shall be subject to a minimum of 1200 degrees F for at least 0.5 seconds. Temperature and oxygen shall be monitored and recorded continuously, and the records made available for Department inspection. The temperature devices shall be certified by the manufacturer to be accurate to within ±1 percent of the temperature being measured. The oxygen monitors shall be certified by the manufacturer to be accurate to within 0.1 percent oxygen by volume.
[Rule 62-296.404(5)(c), F.A.C., and Construction Permit AC03-190964]

C.14. Sulfur dioxide emissions shall be controlled, when firing 100% fuel oil and/or incinerating TRS gases, by maintaining the pH of the venturi scrubber scrubbing medium above 8.0. Compliance shall be based upon a three-hour average. The pH shall be monitored and recorded continuously, and the records made available for Department inspection. The set point for this parameter will be re-evaluated during the annual testing and is subject to Department approval.
[Construction Permit AC03-190964]

C.15. Quarterly Emission Reports. See common condition number **K.2.**

C.16. Determination of Process Variables. See common condition number **K.3.**

C.17. Excess Emissions. See common condition number **K.5.**

C.18. Periodic Monitoring. Within six months of the effective date of this permit, the permittee shall install the necessary equipment to monitor either scrubber flow or differential pressure. The set point for this parameter will be established during the annual testing and is subject to Department approval. Hourly monitoring records shall be maintained and available for inspection by the Department.
[Rule 62-213.440(4), F.A.C.]

Subsection D. This section addresses the following emissions units.

E.U. ID No.	Brief Description
021	No. 1 Smelt Dissolving Tank with a mist eliminator and stack sprays to control emissions.
020	No. 2 Smelt Dissolving Tank with a mist eliminator and stack sprays to control emissions.

This emissions unit is an existing source, not subject to NSPS or PSD.

The following specific conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

D.1. Capacity. The maximum operating rate of each unit is 123,700 pounds of black liquor solids per hour fired in its respective recovery furnace. Records of the black liquor solids throughput for each smelt dissolving tank shall be maintained and available for inspection by the Department. {Permitting note: The capacity limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.}
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

D.2. Hours of Operation. These emissions units are allowed to operate continuously, i.e., 8,760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

D.3. Particulate Matter. Particulate matter from each unit shall not exceed 29 pounds per hour at the maximum operating rate, nor that allowed by the process weight table.
[Rule 62-296.320(4)(a), F.A.C.]

D.4. Total Reduced Sulfur. Total reduced sulfur from each unit shall not exceed 0.048 pounds per 3000 pounds of black liquor solids as hydrogen sulfide (12-hour average).
[Rule 62-296.404(3)(d)1., F.A.C.]

D.5. Visible Emissions. Visible emissions shall not exceed 20% opacity. If observed greater than 20% opacity by the Department, a special compliance test may be required to demonstrate compliance with the particulate matter mass emissions standard.
[Rule 62-296.404(2)(b), F.A.C.]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

D.6. Emissions Tests. See common condition number **K.1.**

D.7. Particulate Matter. The test method for particulate matter shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rules 62-296.404(4)(c)1. and 62-297.401, F.A.C.]

D.8. Total Reduced Sulfur. The test method for total reduced sulfur shall be EPA test method 16, 16A or 16B incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rules 62-296.404(4)(c)3. and 62-297.401, F.A.C.]

D.9. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rule 62-297.401, F.A.C.]

Monitoring of Operations

D.10. Total Reduced Sulfur. Compliance with the TRS standard shall be demonstrated by maintaining the pre-demister weak wash injection fluid at a minimum of 20 and 40.8 gallons per minute based on a 12-hour average for No. 1 and No. 2 smelt dissolving tank, respectively. Flow rates shall be checked and recorded hourly and the records maintained and made available for inspection by the Department. The set point for this parameter will be re-evaluated during the annual testing and is subject to Department approval. All 12-hour averages below the set points will be reported as excess emissions as outlined in D.11., below.
[Rule 62-296.404(3)(d)2., F.A.C.]

D.11. Quarterly Emission Reports. See common condition number **K.2.**

D.12. Determination of Process Variables. See common condition number **K.3.**

D.13. Excess Emissions. See common condition number **K.5.**

Subsection E. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
004	Lime Kiln with a venturi scrubber to control particulate matter emissions.

This emissions unit is an existing source, not subject to NSPS or PSD.

The following specific conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

E.1. Capacity. The maximum allowable operating rate is 85,000 pounds per hour of lime mud input, dry basis (24-hour average), based on a maximum lime production of 36,700 lbs CaO/hr dry. Capacity records shall be maintained and available for inspection by the Department.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., and Construction Permit AC03-149719]

E.2. Methods of Operation - Fuels. This emission unit shall be fueled by natural gas or number 6 fuel oil with a maximum sulfur content of 2.5 %, by weight. Records of the sulfur content of each shipment of fuel oil shall be maintained and available for inspection by the Department. The No. 6 fuel oil or natural gas firing rate shall not exceed 139 MMBtu or 216 MMBtu per hour heat input, respectively. The blending of fuel oil to achieve the sulfur standard is prohibited.
[Rules 62-4.160(2) and 62-213.440(1), F.A.C.]

E.3. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

E.4. Particulate Matter. Particulate matter emissions from this unit shall not exceed 29.83 pounds per hour, nor that allowed by the process weight table.
[Rule 62-296.320(4)(a), F.A.C., and construction permit AC03-149719]

E.5. Total Reduced Sulfur. Total reduced sulfur emissions shall not exceed 20 ppm by volume on a dry basis at standard conditions corrected to 10% oxygen as a 12-hour average.
[Rule 62-296.404(3)(e)1, F.A.C.]

E.6. Visible Emissions. Visible emissions shall not exceed 20% opacity. If observed greater than 20% opacity by the Department, a special compliance test may be required to demonstrate compliance with the particulate matter mass emissions standard.
[Rule 62-296.404(2)(b), F.A.C.]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

E.7. Emissions Tests. See common condition number **K.1.**

E.8. Particulate Matter. The test method for particulate matter shall be EPA test method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rules 62-296.404(4)(b)1., and 62-297.401, F.A.C.]

E.9. Total Reduced Sulfur. The test method for total reduced sulfur shall be EPA test method 16, 16A, or 16B incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rules 62-296.404(4)(b)3., and 62-297.401, F.A.C.]

E.10. Visible Emissions. The test method for visible emissions shall be EPA test method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rule 62-297.401, F.A.C.]

Continuous Monitoring Requirements

E.11. Total Reduced Sulfur Continuous Monitoring. See common condition number **K.4.**

E.12. Quarterly Emission Reports. See common condition number **K.2.**

E.13. Determination of Process Variables. See common condition number **K.3.**

E.14. Excess Emissions. See common condition number **K.5.**

E.15. Periodic Monitoring. The scrubber flow shall be maintained at a minimum of 800 gallons per minute, 190 gallons per minute minimum scrubber recirculation flow and a minimum differential pressure of 18 inches of water. The set point for these parameters will be re-evaluated during the annual testing and is subject to Department approval. Hourly records of the flow and pressure differential shall be maintained and available for inspection by the Department.
[Rule 62-213.440(4), F.A.C.]

Subsection F. This section addresses the following emissions units.

E.U. ID No.	Brief Description
031	38,500 gallon fixed-roof, nitrogen blanketed, methanol storage tank

This emissions unit is a new source, subject to NSPS but not PSD.

The following specific conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

F.1. Capacity. This emissions unit has a 38,500 gallon storage capacity. Maximum annual throughput is 240,000 gallons per year. {Permitting note: The capacity limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.}
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

F.2. NSPS Provisions. The owner or operator of this storage vessel shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the life of the source. Records of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period shall be maintained for a period of five years.
[Rule 62-204.800(7)(b)16., F.A.C., and 40CFR 60.116(b)]

F.3. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Subsection G. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
026	Nos. 1A, 2 and 3 Multiple Effect Evaporator (MEE) Sets

This emissions unit is an existing source, not subject to NSPS or PSD.

The following specific conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

G.1. Capacity. The maximum process input rate is 359,400 pounds of dry black liquor solids per hour to the MEE system. (Evaporator sets No. 1A, No. 2, and No. 3 process 208,000; 51,900; and 99,500 pounds of dry BLS/hr, respectively). Capacity records shall be maintained and available for inspection by the Department.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. and construction permits AC03-149716, AC03-149717 and AC03-149718]

G.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

G.3. Total Reduced Sulfur. The TRS emissions from the MEE Systems shall be collected and incinerated in the Lime Kiln or the No. 4 Combination Boiler. Malfunctions resulting in uncontrolled TRS emissions from the MEE Systems shall be managed in accordance with the facility's TRS Venting Contingency Plan attached to and made a part of this permit.
[Rule 62-4.404(3)(a), F.A.C.]

G.4. A log of NCG ventings to the atmosphere shall be maintained and available for inspection by the Department. The log shall include but not be limited to the date and time, duration, cause and corrective actions taken for each venting occurrence. In no event shall the cumulative venting time exceed ten days in any annual period. Each venting occurrence shall be reported to the Department verbally by the next working day and a copy of the log entry submitted within 30 days.
[Rule 62-4.404(3)(a), F.A.C.]

Subsection H. This section addresses the following emissions units.

E.U. ID No.	Brief Description
027	Digester System, Non- Condensable Gas (NCG) Handling System

This emissions unit is a new source, subject to NSPS but not PSD.

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

H.1. Capacity. For PSD purposes, the maximum allowable operating rate is 120 tons of air dried unbleached pulp (ADUP) per hour and a maximum production rate of 668,850 tons per years of ADUP. Capacity records shall be maintained and available for inspection by the Department.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. and construction permit AC03-252285]

H.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

H.3. Non-Condensible Gases (NCGs). The NCGs from the batch digesters, blow tanks, accumulator tank, and turpentine condenser system shall be destroyed in the lime kiln or the No. 4 Combination boiler by subjecting the TRS gases to at least 1200°F for at least 0.5 seconds. Malfunctions shall be handled in accordance with the facility's TRS Venting Contingency Plan attached to and made a part of this permit.
[Rules 62-204.800(7)(b)35., and 62-296.404(3)(a)1., F.A.C.]

Monitoring of Operations

H.4. A log of NCG ventings to the atmosphere shall be maintained and available for inspection by the Department. The log shall include but not limited to the date and time, duration, cause and corrective actions taken for each venting occurrence. In no event shall the cumulative venting time exceed ten days in any annual period.
[Rules 62-204.800(7)(b)35., and 62-296.404(3)(a)3., F.A.C.]

H.5. Determination of Process Variables. See common condition number **K.3.**

Subsection I. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
005	Lime Slaker with a wet cyclonic scrubber to control particulate matter emissions.

This emissions unit is an existing source, not subject to NSPS or PSD.

The following specific conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

I.1. Capacity. The maximum operating rate is 81.6 tons per hour (60.39 tph green liquor and 21.18 tph lime. {Permitting note: The capacity limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability.}
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

I.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

I.3. Particulate Matter. Particulate matter shall not exceed 32.3 pounds per hour, nor that allowed by the process weight table.
[Rule 62-296.320(4)(a), F.A.C.]

I.4. Visible Emissions. Visible emissions shall not exceed 20% opacity. If observed greater than 20% opacity by the Department, a special compliance test may be required to demonstrate compliance with the particulate matter mass emissions standard.
[Rule 62-296.404(2)(b), F.A.C.]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

I.5. Emissions Tests. See common condition number **K.1.** Compliance tests are required upon permit renewal.
[Rule 62-297.310, F.A.C.]

I.6. Particulate Matter. The test method shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rule 62-296.320(4)(a) and 62-297.401, F.A.C.]

I.7. Visible Emissions. The test method for visible emissions shall be EPA test method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rule 62-297.401, F.A.C.]

Continuous Monitoring Requirements

I.8. The weak wash flow to the scrubber shall not be less than 30 gallons per minute. The flow shall be monitored and recorded continuously and the records made available to the Department for inspection. The set point for this parameter will be re-evaluated during the annual testing and is subject to Department approval.
[Rule 62-4.160(2), F.A.C., and Permit AO03-252354]

I.9. Determination of Process Variables. See common condition number **K.3.**

I.10. Excess Emissions. See common condition number **K.5.**

Subsection J. This section addresses the following emissions units.

E.U. ID No.	Brief Description
030	Woodyard

This emissions unit is an existing source, not subject to NSPS or PSD.

The following specific conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

J.1. Capacity. The maximum operation rate of this emissions unit is 710,160 cords/year of roundwood and 609,840 cords/year of purchased chips. Operation records shall be maintained and available for inspection by the Department.
[Rules 62-4.160(2), 62-210.200(PTE), F.A.C. and permit 0050009-003-AC]

J.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

J.3. Visible Emissions Visible emissions shall not exceed 20% opacity.
[Rule 62-296.320(4)(b)1., F.A.C.]

J.4. Reasonable precautions shall be taken to prevent emissions of unconfined particulate matter. Reasonable precautions shall include, but are not limited to, the following:

a. Maintenance of roads, parking areas and yards.
b. Application of water or other dust suppressants when necessary to control emissions.
c. Removal of particulate matter from roads and other paved areas under control of the owner or operator, and from buildings or work areas to prevent re-entrainment.
d. Permittee will protect dust transfer points and transport and storage containers from wind action which might make dust airborne.
e. Chips manufactured on-site shall be screened following storage.
f. Chips will be screened following removal from storage prior to conveying to digesters.
g. All conveyor systems shall be covered or enclosed.
h. Drop distance from chip storage stacker shall be maintained to a minimum.
i. All access roads shall be paved.

[Rule 62-296.320(4)(c), F.A.C., and Construction Permit 0050009-003-AC]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

J.5. Visible Emissions testing shall be performed upon request by the Department. [Rule 62-204.800(7)(b)1., F.A.C.]

J.6. Visible Emissions. The test method for visible emissions shall be EPA test method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. [Rule 62-297.401, F.A.C.]

J.7. Determination of Process Variables. See common condition number **K.3.**

J.8. Excess Emissions. See common condition number **K.5.**

Subsection K. Common Conditions.

{Permitting Note: The following conditions are placed here as a convenience and to avoid duplication. See specific conditions in Subsections A through J for applicability.}

K.1. Test Methods and Procedures

Emissions tests are required to show continuing compliance with the standards of the Department. The test results must provide reasonable assurance that the source is capable of compliance at the permitted maximum operating rate. Tests shall be conducted annually, unless otherwise specified in Sections III.A. through III.J. Results shall be submitted to the Department within 45 days after testing. The Department shall be notified at least 15 days prior to testing to allow witnessing.
[Rule 62-297.310, F.A.C.]

Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)b., F.A.C.]

K.2. Quarterly Reporting Requirements.

The permittee shall submit a quarterly written report of emissions in excess of any emission limiting standards.

(a) The report shall include the following information:

1. The magnitude of excess emissions and the date and time of commencement and completion of each time period in which excess emissions occurred.

2. Specific identification of each period of excess emissions that occurs including startups, shutdowns, and malfunctions of the affected emissions unit. An explanation of the cause of each period of excess emissions, and any corrective action taken or preventive measures adopted.

3. The date and time identifying each period during which each continuous emissions monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments.

4. When no excess emissions have occurred or the continuous emissions monitoring system(s) have not been operative, or have been repaired or adjusted, such information shall be stated in the report.

(b) Any owner or operator shall maintain a complete file of any measurements, including continuous emissions monitoring system, monitoring device, and performance testing measurements; any continuous emissions monitoring system performance evaluations; any continuous emissions monitoring system or monitoring device calibration checks; any adjustments and maintenance performed on these systems or devices; and any other information required, recorded in a permanent legible form available for inspection.
[Rules 62-296.405(1)(g), 62-296.404(6), and 62-204.800(7), F.A.C.]

K.3. Determination of Process Variables.

The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.]

K.4. Total Reduced Sulfur Continuous Emissions Monitoring Requirements.

The permittee shall maintain a continuous monitoring system for monitoring total reduced sulfur (TRS) emissions. The TRS continuous emissions monitoring system shall be installed, calibrated, certified and operated pursuant to all of the following provisions:

a. The continuous emissions monitoring system shall monitor and record the concentration of total reduced sulfur (TRS) emissions on a dry basis and the percentage of oxygen by volume on a dry basis.

b. The continuous emissions monitoring system shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

c. The continuous emissions monitoring system shall be located downstream of the control device such that representative measurements of process parameters can be obtained.

d. The continuous emissions monitoring system shall be located, installed and certified pursuant to the provisions of 40 CFR Part 60, Appendix B, Performance Specification 2 and Performance Specification 3, and 40 CFR Part 60, Appendix B, Performance Specification 5, which are adopted by reference in Rule 62-204.800(7), F.A.C. The exception is that the phrase "or other approved alternative" in s. 3.2 of Performance Specification 5 is not adopted. For the purposes of compliance testing and certification of continuous emissions monitoring systems, 40 CFR Part 60, Appendix A, Reference Method 16 and Method 16A, adopted by reference in Rule 62-204.800(7), F.A.C., are to be used.

e. The continuous emissions monitoring system shall be in continuous operation, except when the emissions unit is not operating, or during system breakdowns, repairs, calibration checks, and zero and span adjustments.

f. During any initial compliance tests conducted pursuant to Rule 62-296.404, F.A.C., or within 30 days thereafter, and at such times as there is reason to believe the system does not conform to the performance specifications under this rule (for example, equipment repairs, replacements, excessive drift and such), the owner or operator of any affected emissions unit shall conduct continuous monitoring system performance evaluations and furnish the Department, within sixty days thereof, two copies of a written report of the results of such tests. These continuous emissions monitoring systems performance evaluations shall be conducted in accordance with the requirements and procedures contained in Rule 62-296.404(5)(b)1.d., F.A.C.

g. The continuous emissions monitoring system shall have a maximum span value not to exceed:

(i) A total reduced sulfur concentration of 30 ppm for the total reduced sulfur continuous emissions monitoring system on any new design direct-fired kraft recovery furnace that is not direct-fired, new design suspension-burning kraft recovery furnace, incinerator, digester system or multiple effect evaporator system.

(ii) A total reduced sulfur concentration of 50 ppm for the total reduced sulfur continuous emissions monitoring system on any old design kraft recovery furnace, new design kraft recovery furnace that is not direct-fired, new design direct-fired suspension-burning kraft recovery furnace, cross recovery furnace, lime kiln or calciner.

(iii) 20 percent oxygen for the continuous oxygen monitoring system.

h. The continuous emissions monitoring system shall be checked by the owner or operator in accordance with a written procedure at least once daily and after any maintenance to the system. The owner or operator shall check the zero (or low level value between 0 and 20 percent of span value) and span (90 to 100 percent of span value) calibration drifts. The zero and span shall be adjusted, as a minimum, whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications referenced in Rule 62-296.404(5)(b)1.d., F.A.C. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified.
[Rule 62-296.404(5), F.A.C.]

K.5. Excess Emissions.

(1) Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

(2) Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

(3) Excess emissions from existing fossil fuel steam generators resulting from boiler cleaning (soot blowing) and load change shall be permitted provided the duration of such excess emissions shall not exceed 3 hours in any 24-hour period and visible emissions shall not exceed Number 3 of the Ringelmann Chart (60 percent opacity), and providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed by this subparagraph, for boiler cleaning and load changes, at units which have installed and are operating, or have committed to install or operate, continuous opacity monitors.

Particulate matter emissions shall not exceed an average of 0.3 lbs. per million BTU heat input during the 3-hour period of excess emissions allowed by this subparagraph.

(4) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

(5) Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest.

(6) In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

The requirements of this rule do not vary any requirement of a NSPS, NESHAP, or Acid Rain program provision.
[Rule 62-210.700, F.A.C.]

Appendix H-1, Permit History/ID Number Changes

Stone Container Corporation
Panama City Mill

FINAL Permit No.: 0050009-002-AV
Facility ID No.: 0050009

Permit History (for tracking purposes):

E.U. ID No.	Description	Permit No.	Issue Date	Expiration Date	Extended Date[1, 2]	Revised Date(s)
001	Recovery Boiler #1	AO03222669	6/10/93	3/1/98		
004	Lime Kiln	AO03174793	8/10/90	8/1/95		
005	Lime Slaker	AO03252354	9/21/94	6/30/99		
015	Bark Boiler #3	AO03252353	7/5/94	5/31/99		
016	Bark Boiler #4	AO03223447	6/10/93	3/1/98		
019	Recovery Boiler #2	AO03240555	2/11/94	12/31/98		
020	Smelt Dissolving Tank #2	AO03240550	2/17/94	12/31/98		
021	Smelt Dissolving Tank #1	AO03222668	6/10/93	3/1/98		
026	Evaporator System (MEE)	AO03174796	8/10/90	8/1/95		
027	Wood Pulp Digester System	AO03270940	6/6/95	5/31/00		
030	Woodyard Facility	AO03190807	1/23/96	1/1/96		
031	Methanol Storage Tank	0050009001AC	5/9/96	5/9/01		

Notes:
1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.
2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.
{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

Golder Associates Inc.

6241 NW 23rd Street, Suite 500
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June 14, 2000

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RECEIVED
JUN 15 2000
BUREAU OF AIR REGULATION

Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Attention: Mr. A. A. Linero, P.E.
Administrator, New Source Review Section

RE: FILE NO. 0050009-005-AC (PSD-FL-288)
STONE CONTAINER CORP. PANAMA CITY MILL
PULP PRODUCTION INCREASE

Dear Mr. Linero:

This correspondence is in response to the Department's letter dated May 9, 2000, concerning the above referenced pulp production increase for Stone Container Corp.'s (SCC) Panama City mill. The letter contains five comments by the Department, as well as a letter with comments from the U.S. Fish and Wildlife Service (USFWS). The Department's comment regarding the ISC-PRIME model is also addressed. Responses to each of the comments are presented in the same order as they appear in the referenced letters.

FDEP Comments

1. SCC continues to object to the Department's recent re-interpretation of the Florida PSD rules to require application of best available control technology (BACT) to those emission units for which there is no physical modification or change in the method of operation. Please refer to Attachment A for a discussion of this new interpretation and SCC's response. Counsel for SCC has advised the company that this constitutes adoption of non-rule policy, which is prohibited under the Florida Administrative Procedures Act. Nevertheless, SCC has provided the information requested in Comment 1 of the Department's letter. As explained below, since this application only involves existing units, the emissions limits SCC has proposed in its application are in fact BACT.

   There are several fuel burning sources at the Panama City mill which burn, or are permitted to burn, No. 6 fuel oil with a maximum sulfur content of 2.4 percent. These consist of the two recovery boilers, the two combination boilers, and the lime kiln.

   In the case of the recovery boilers, fuel oil is only burned for startup/shutdown and as an auxiliary fuel. When oil is burned as an auxiliary fuel, in combination with black liquor (with up to 50 percent of total heat input due to fuel oil), NCASI studies have shown that no increase in SO_2 emissions occurs due to high sulfur fuel oil firing. This is due to two reasons. First, the black liquor contains in the range of 4 to 6-percent sulfur. Therefore, firing fuel oil of less than 2.5-percent sulfur results in a reduction in sulfur input to the

furnace. Secondly, the SO_2 generated in the recovery furnace is converted to alkali sulfates that become part of the smelt or the fly ash. Therefore, fuel oil firing would not increase SO_2 emissions except for periods during startup/shutdown conditions when the fuel oil constitutes greater than 50 percent of the total heat input. These conditions occur very infrequently and occur for limited duration.

In the case of the lime kiln, SO_2 emissions are negligible and are minimally affected by the fuel oil sulfur content. This has been demonstrated from source testing of lime kilns, as investigated by NCASI, and shown by other lime kiln test data. This is due to the large SO_2 absorption capacity of lime kilns, resulting from the lime material being processed, which is highly alkaline in nature.

The combination boilers will be controlled through pH monitoring and control of the caustic scrubbing media and/or a continuous SO_2 monitor in order to meet lower SO_2 emission limits proposed in SCC's application. The lower SO_2 emission limits that SCC has proposed will eliminate worst case modeled exceedances of the SO_2 ambient air quality standards (AAQS). SCC has chosen to limit SO_2 emissions through pH monitoring and control of the caustic scrubbing media and/or a continuous SO_2 monitor instead of using lower sulfur fuels. Either method achieves the same results.

The No. 3 Combination Boiler is permitted for fire bark/wood, No. 6 fuel oil, No. 2 oil and natural gas. The No. 4 Combination Boiler is permitted to fire bark/wood, coal, No. 6 fuel oil, No. 2 oil and natural gas. The proposed combined SO_2 emission limit for the two boilers is 525 lb/hr. The current potential SO_2 emissions from the two boilers, based on fuel oil with 2.4-percent sulfur, are as follows:

No. 3 Combination Boiler: 2,520 gal/hr x (157 x 2.4) lb/1000 gal = 950 lb/hr SO_2

No. 4 Combination Boiler: 3,153 gal/hr x (157 x 2.4) lb/1000 gal = 1,188 lb/hr SO_2

Total = 950 lb/hr + 1,188 lb/hr = 2,138 lb/hr SO_2

Fuel oil with a sulfur content of less than 0.7 percent (the minimum for No. 6 fuel oil) cannot be efficiently utilized in the existing fuel oil burners, since the burners are designed for No. 6 fuel oil. If fuel oil with a sulfur content of 0.7 percent were utilized, the potential SO_2 emissions would be 624 lb/hr. Therefore, use of lower sulfur No. 6 fuel oil would not result in lower emissions than those achieved through pH monitoring and control of the caustic scrubbing media (i.e., resulting in SO_2 emissions of 525 lb/hr).

The cost of using lower sulfur fuel oil, assuming all the sulfur in the fuel oil is converted to SO_2, can be calculated based on fuel characteristics and prices of fuel oil. The cost effectiveness calculations and the basis of the calculations are shown in Table A attached. However, as discussed previously, lower sulfur fuel would have little or no effect upon SO_2 emissions from the recovery boilers, the lime kiln, or the combination boilers. Therefore, the actual cost per ton of SO_2 removed would be considerably higher than shown in Table A.

Based on Panama City mill's fuel oil consumption in 1999 (18 million gallons) and current quoted oil prices, the cost of switching to 1.5-percent sulfur oil would be approximately $500,000/yr; switching to 1.0-percent sulfur oil would be $720,000/yr; and switching to 0.5-percent sulfur oil would be $2,300,000/yr. Based on the previous calculation of potential uncontrolled emissions from fuel oil firing, use of 1.5- or 1.0-percent sulfur fuel oil would not lower SO_2 emissions below the already proposed limit of 525 lb/hr for the two combination boilers. Use of 0.5-percent sulfur fuel oil would lower SO_2 emissions to about 445 lb/hr, or about an 80 lb/hr (350 TPY) decrease compared to the proposed limit of 525 lb/hr. Based on the additional cost of 0.5-percent fuel oil ($2,300,000/yr), the cost effectiveness of using 0.5-percent sulfur fuel oil is $6,570/ton of SO_2 removed. This estimate is conservative since SCC attempts to minimize oil burning and maximize coal and bark/wood burning for economic reasons. Additionally, as described above, use of 0.5-percent sulfur fuel oil would necessitate replacement of fuel oil burners, which are currently designed to fire No. 6 fuel oil. This would be an additional significant cost.

Based on the above discussion, the use of lower sulfur fuel oil is not economically feasible.

2. Stack test data for the requested sources for the last two years are attached, as requested. Note that only a limited number of pollutants are required to be tested at Panama City, therefore, data for all PSD affected pollutants are not available.

3. Both FDEP and EPA have generally used a "consecutive" two-year period for determining baseline emissions for PSD applicability unless some other period was deemed more representative of normal full operation. Since 1998 was not a "representative" year of normal operation, due to a 3-month shutdown of the mill, the year 1999 was not used since this would not represent a consecutive 2-year period. Therefore, the most recent consecutive two-year period representative of normal source operation (1996-1997) was selected.

4. The overall mill flow diagram has been corrected and is attached.

5. SCC is addressing, in a separate MACT compliance project application and permit, the potential increases in SO_2 from the No. 3 Combination Boiler when burning HAP/TRS containing gases from the proposed condensate stripper. As discussed in Appendix B, any increase in SO_2 emissions from burning stripper off gases to meet the MACT I requirements should be excluded from PSD review. In any event, the SO_2 emissions will be controlled by limiting the two combination boilers to a total of 525 lb/hr through wet caustic scrubbing and/or a continuous SO_2 monitor. In addition, no changes in the design or sizing of the condensate stripper (500 gallons per minute), as presented in the MACT application and reflected in the MACT construction permit, are needed to accommodate the increased pulp production, and therefore the condensate stripper emissions unit is not "affected" by the proposed modification.

Golder will continue to pursue approval of the ISC-PRIME model with the Department and the U.S. EPA. A revised ambient impact analysis for the Panama City mill has been submitted, which presents the necessary information for approval of the ISC-PRIME model.

USFWS COMMENTS

Golder Associates Inc. (Mr. David A. Buff, P.E.) contacted the USFWS (Ms. Ellen Porter and Ms. Kirsten King) to discuss the USFWS comment letter. It was stated by USFWS that the ambient impact analysis report for the Panama City mill had been received, and this resolved concerns over the PSD Class I increment consumption. Mr. Buff explained that the BACT requirements for emission units other than the digesters was a "state-only" BACT analysis, since EPA rules would not subject these other sources to BACT. After researching this issue, the USFWS stated they agreed that BACT would only apply to the digesters and the control device for the digesters (lime kiln for SO_2 only), and that this resolved their concerns over the BACT analysis.

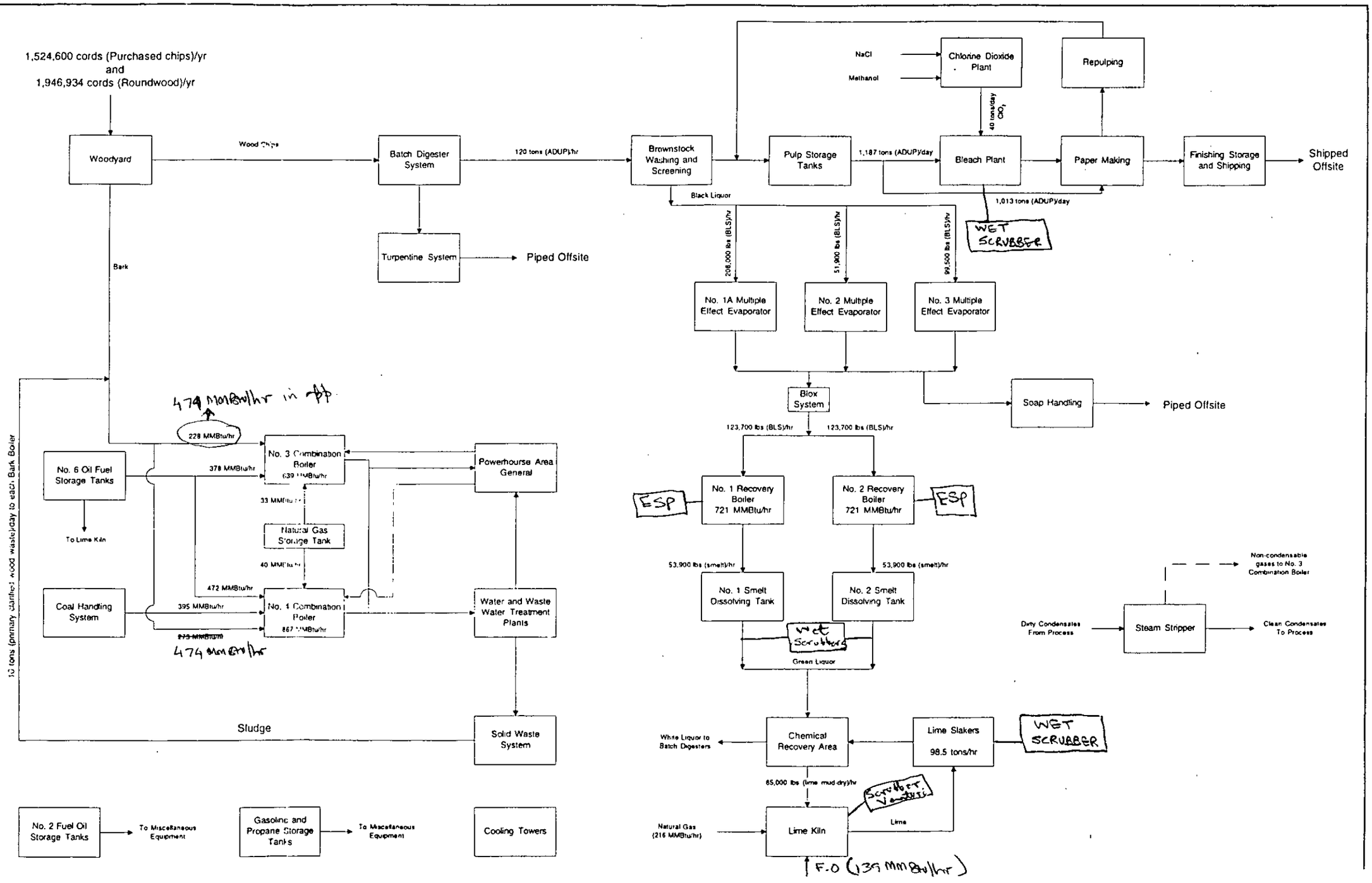
The USFWS letter presented a table showing the net increase in emissions based on current actual emissions and future potential emissions. The "future potential emissions" used in the permit application were based on the current maximum permitted emission limits in the existing Panama City mill permits. In order to present the ultimate future case, the potential increases in emissions due to the project have been recalculated using the EPA's proposed MACT II limits for combustion sources. Updated tables from the Supplemental Information report submitted by SCC in April 2000, reflecting these changes, are attached. As shown, subtracting the average 1996-1997 actual emissions from the potential emissions for the affected units, the revised calculated net increase in emissions for PM is 264.6 tons per year (TPY), and for PM-10 is 207.4 TPY. These are much lower than the previous estimates of 779 TPY for PM and 624 TPY for PM-10 calculated using the current allowable emissions. Based on the new limits SCC is proposing to meet in accordance with MACT II, we believe that there will be no increase in actual emissions as a result of the increased pulp production.

Best Available Control Technology Review

Based on Mr. David Buff's discussion with USFWS, they now recognize that this is a "state-only" BACT evaluation. Under federal EPA PSD rules, the only emission units required to undergo BACT review are the digesters. While the digesters will not undergo a physical change or a change in the method of operation, they are subject to BACT review because of the PSD production thresholds established for the digesters through the TRS compliance project permits issued in 1989. No other emission units at the facility are undergoing a physical change or change in the method of operation as a result of the pulp production increase. A BACT review is being performed for the other mill sources only as a result of FDEP's stated interpretation of the state PSD regulation.

Recovery Boilers

Again, while we understand that USFWS no longer intends to pursue its BACT comments now that they had better understand what is covered by our permit application, we have nevertheless addressed the substance of their comments. We believe that the recovery boiler limits cited by the USFWS are for new recovery boilers, not existing boilers that have undergone BACT review. Obviously, a new recovery boiler can be cost effectively designed


1,524,600 cords (Purchased chips)/yr
and
1,946,934 cords (Roundwood)/yr
Woodyard
Wood Chips
Batch Digester System
120 tons (ADUP)/hr
Turpentine System
Piped Offsite
Bark
Brownstock Washing and Screening
Pulp Storage Tanks
1,187 tons (ADUP)/day
Bleach Plant
Paper Making
Finishing Storage and Shipping
Shipped Offsite
NaCl
Methanol
Chlorine Dioxide Plant
40 tons/day ClO2
Repulping
Black Liquor
1,013 tons (ADUP)/day
WET SCRUBBER
208,000 lbs (BLS)/hr
51,900 lbs (BLS)/hr
99,500 lbs (BLS)/hr
No. 1A Multiple Effect Evaporator
No. 2 Multiple Effect Evaporator
No. 3 Multiple Effect Evaporator
Blox System
Soap Handling
Piped Offsite
123,700 lbs (BLS)/hr
123,700 lbs (BLS)/hr
ESP
No. 1 Recovery Boiler 721 MMBtu/hr
No. 2 Recovery Boiler 721 MMBtu/hr
ESP
53,900 lbs (smelt)/hr
53,900 lbs (smelt)/hr
No. 1 Smelt Dissolving Tank
No. 2 Smelt Dissolving Tank
Wet Scrubbers
Green Liquor
Non-condensable gases to No. 3 Combination Boiler
Dirty Condensates From Process
Steam Stripper
Clean Condensates To Process
White Liquor to Batch Digesters
Chemical Recovery Area
Lime Slakers
98.5 tons/hr
WET SCRUBBER
65,000 lbs (lime mud-dry)/hr
Scrubber Vented
Lime
Natural Gas (216 MMBtu/hr)
Lime Kiln
F-0 (139 MMBtu/hr)
474 MMBtu/hr in
228 MMBtu/hr
No. 6 Oil Fuel Storage Tanks
378 MMBtu/hr
No. 3 Combination Boiler
639 MMBtu/hr
Powerhouse Area General
To Lime Kiln
33 MMBtu/hr
Natural Gas Storage Tank
40 MMBtu/hr
472 MMBtu/hr
Coal Handling System
395 MMBtu/hr
No. 4 Combination Boiler
867 MMBtu/hr
Water and Waste Water Treatment Plants
474 MMBtu/hr
10 tons (primary clarifier) wood waste/day to each Bark Boiler
Sludge
Solid Waste System
No. 2 Fuel Oil Storage Tanks
To Miscellaneous Equipment
Gasoline and Propane Storage Tanks
To Miscellaneous Equipment
Cooling Towers

to meet the 0.021 gr/dscf PM limit suggested by USFWS. However, in order for the SCC recovery boilers to meet such a limit on a continuous basis, new ESPs would be required. This is because it is not possible to upgrade the existing ESPs, because of their physical configuration (i.e., location on the roof of the recovery boiler building, with no ability to add an additional field). New stacks, ductwork and other alterations would also be required.

New ESPs for the SCC recovery boilers have been estimated to cost at least $7.5 million per boiler, excluding any cost of downtime to perform the installation. The annualized cost of just the capital investment for the two boilers is $1.65 million/yr ($15 million x 0.11 capital recovery factor). Potential PM emissions for each recovery boiler at the proposed 0.044 gr/dscf limit are 309.1 TPY. At 0.021 gr/dscf, the level of control suggested by USFWS, potential PM emissions would be 147.5 TPY. Therefore, the reduction in potential PM emissions would be 161.6 TPY for each boiler, or 323.2 TPY for both boilers. Even looking solely at capital cost, it would cost over $5,100 for each additional ton of PM removed. This does not account for any annual operating and maintenance costs, or economic losses due to mill downtime in order to install the new ESP's. This is a very high cost and is ruled out as economically infeasible.

In addition, although SCC agrees to comply with the proposed MACT II PM limit of 0.044 gr/dscf, actual emissions from SCC's recovery boilers are already in the range of 0.015 to 0.025 gr/dscf. Although SCC cannot agree to a limit lower than 0.044 gr/dscf in order to maintain an adequate safety margin above actual emissions, actual emissions are expected to remain below 0.044 gr/dscf in the future.

In regards to add-on NO_x controls, the first step in a BACT analysis is to identify technically feasible alternatives. Technical feasibility is demonstrated through proven operating systems. There are no known SNCR or SCR systems operating on recovery boilers. The EPA's RACT/BACT/LAER Clearinghouse does not list any recovery boilers as having SNCR or SCR determined as BACT for NO_x emissions. Although there may have been advances in such systems, until there are proven operating systems, SCC cannot commit to such a system on an existing recovery boiler. No recovery boiler to date has been required to install these systems as BACT. BACT for all previous determinations has been established as good combustion practices and proper design and operation. Therefore, SNCR/SCR is considered technically infeasible. It is also noted that NO_x emissions from direct contact type recovery boilers are already low (average of 0.1 lb/MMBtu) compared to other fuels, including fossil fuels and carbonaceous fuels. Add-on NO_x controls are ruled out from further consideration.

In regards to TRS control, the cost for converting the existing boilers to low odor design has been estimated at $25 million each boiler, or $50 million total. The annualized capital cost of this investment is $5.5 million/yr. The potential reduction in TRS emissions, from 17.5 ppm to 5 ppm , achievable through low odor design, is 54.2 TPY each boiler (75.9 TPY – 21.7 TPY), or 108 TPY for both boilers combined. The cost is therefore over $51,000/ton of TRS removed. This does not account for any annual operating and maintenance costs, or economic losses due to mill downtime in order to convert the recovery boilers. This option is therefore ruled out based on economic impacts. It is noted that actual TRS emissions from

the two SCC recovery boilers averaged about 10 ppm in 1999, below the current limit of 17.5 ppm.

Due to relatively low emissions of SO_2 from recovery boilers, flue gas desulfurization (FGD) systems have not been applied to recovery boilers. There are no known FGD systems operating on recovery boilers. The EPA's RACT/BACT/LAER Clearinghouse does not list any recovery boilers as having FGD systems required as BACT for SO_2 emissions. BACT for all previous determinations has been established as good combustion practices and proper design and operation.

Nevertheless, a cost analysis for adding a FGD system to the existing recovery boilers is was performed. A dry lime injection system or spray dryer were considered, but were rejected due to limitations on the existing ESPs. The existing ESPs would not be able to handle the additional particulate loading from these systems. As described previously, the existing ESPs cannot be upgraded due to their location on the roof of the recovery boiler building. Replacing the existing ESPs with new ESPs was ruled out as economically infeasible.

An add-on wet limestone FGD system would be the only feasible alternative for SO_2 control. A wet FGD system achieving 90-percent SO_2 removal is estimated to cost $16 million per recovery boiler (NCASI, 1983). The annual cost of the capital investment would be $1.8 million/yr. Annual O&M costs are estimated at least 3 percent of the capital cost (EPRI, 1983), or at least $0.5 million/yr. Therefore, total annual costs are estimated to be at least $2.3 million/yr per boiler. Estimated potential SO_2 emissions for each recovery boiler are 568.4 TPY. At 90 percent reduction, the total SO_2 reduced is 512 TPY. This analysis shows that the cost effectiveness of SO_2 control is at least $4,500/ton for the wet limestone FGD system. This cost is considered economically prohibitive for the existing recovery boilers. In addition, no other recovery boiler, new or existing, has been required to implement flue gas desulfurization.

Lime Kiln

A new ESP for the SCC lime kiln is estimated to cost $3.1 million, based on the actual cost at a similar SCC mill. The annualized cost of just the capital investment is $340,000/yr. Potential PM emissions from the lime kiln at the proposed limit of 29.83 lb/hr are 130.7 TPY. This is equivalent to 0.051 gr/dscf, assuming the maximum estimated air flow rate for the lime kiln. At 0.033 gr/dscf, as suggested by USFWS, potential PM emissions would be 84.6 TPY. Therefore, the reduction in potential PM emissions would be 46.1 TPY. The cost of this reduction is $ 7,375/ton of PM removed. This is a very high cost and is ruled out as economically infeasible.

Smelt Dissolving Tanks

SCC can commit to meeting a PM limit of 0.2 lb/ton BLS for the smelt dissolving tanks, based on the proposed MACT II. Since SCC will be installing new wet scrubbers in order to meet the MACT requirements for PM, the scrubbers could be designed to meet a PM limit of 0.12 lb/ton BLS, as suggested by USFWS. Meeting a limit of 0.12 lb/ton BLS would be more costly; however, the cost impact cannot be quantified at this time. Moreover, there is no compelling reason to implement this requirement prior to the MACT compliance date. As shown from

the ambient impact analysis, all ambient air quality standards will be met based on the proposed maximum PM emissions for the SCC mill.

Bleach Plant

The new scrubber on the Bleach Plant, to meet the MACT requirements, is now being installed at SCC. To comply with the MACT rules, the installation will be completed by April 16, 2001. SCC will be installing equipment to allow up to 100-percent elemental chlorine-free bleaching by this date. SCC currently uses, and will continue to use, hydrogen peroxide in several stages of the bleaching process. Hence, as of April 16, 2001, the bleach plant will be complying with MACT, which is at least as stringent as whatever might be determined to be BACT for an existing facility.

Lime Slaker

The 4 lb/hr limit was proposed by SCC in order to reduce worst case modeled ambient PM impacts using current allowable emissions. Actual PM emissions during the last two compliance tests averaged 1.26 and 0.53 lb/hr, respectively. Therefore, actual emissions are already similar to 0.9 lb/hr, as suggested by USFWS. Given that this is an existing source and the already low rate of emissions, it would not be cost effective to retrofit additional PM control equipment.

Air Quality Related Values Analysis

The ambient impact analysis report, submitted separately by SCC, addresses Class I increments for PM and SO_2.

Please call if you have any questions concerning this information.

Sincerely,

GOLDER ASSOCIATES INC.

David A. Buff

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Principal Engineer
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SEAL

DB/jkw

Enclosures

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ATTACHMENT A

RESPONSE TO FDEP INTERPRETATION OF STATE PSD RULE

EPA's PSD regulations are codified at 40 CFR 52.21. This rule requires, among other things, that BACT be employed to control emissions from a proposed new source or modification. However, the EPA rules governing control technology review state:

> "A major modification shall apply best available control technology for each pollutant subject to regulation under the Act for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit." (40 CFR 52.21 (j)(3)).

Therefore, it is clear that BACT does not apply to an emissions unit at which there is no physical change or change in the method of operation. Further, under the federal PSD rules, a change in the method of operation specifically excludes increased operating hours and production rates, unless prohibited by a federally enforceable NSR/PSD air construction permit condition that was established after January 6, 1975. (40 CFR 52.21(b)(2)(iii)).

Historically, the federal PSD rule has consistently been interpreted in this manner by EPA, through guidance memos, applicability determinations, and the PSD workshop manual (draft). The only exception to the application of the rule was a recent determination for a case where a separate emissions unit served as the control device for an emissions unit undergoing a modification (such as pulp digesters subject to PSD, with a lime kiln used to incinerate TRS emissions). In that case, EPA determined that the control device was to be considered as part of the emissions unit. Hence, if the emissions unit required BACT review, then the associated emissions unit serving as the control device was also required to undergo BACT review for those pollutants that would significantly increase as a result of the modification.

The State of Florida PSD rule was promulgated in the early 1980's, after EPA revised the federal PSD rule. The State of Florida's PSD rules state that:

> "The proposed facility or modification shall apply Best Available Control Technology (BACT) for each pollutant subject to preconstruction review requirements as set forth in Rule 62-212.400(2)(f), F.A.C.". (Rule 62-212.400(5)(c)).

Thus, the state rule is not as clear as the federal rule. Mr. David Buff, P.E., Q.E.P., now of Golder Associates Inc., recalls that at the time of adoption of the state rule, there was no intention to be more stringent than the EPA PSD rule. It was intended that the rule be interpreted and applied in the same manner as the federal rule. This is witnessed by the fact that an economic impact statement was not performed by the State of Florida at the time of rule adoption, nor was there review by the Governor and Cabinet, which would have been required if the rule was more stringent than the EPA rule.

Interpretation of the state PSD rule in the manner, which FDEP is now prescribing, would have severe economic consequences on sources. Being required to apply BACT to multiple emissions units not being physically modified could result in severe economic impacts, and would likely stifle economic growth. Companies would find PSD too costly or too risky to undertake, and therefore would not be as likely to undertake expansion projects. Generally, as EPA intended, when an emission unit is physically modified, or undergoes a change in the method of operation, a capital expenditure is associated with the change. This is the appropriate time to require additional capital expenditure for pollution control purposes, and makes it much easier to justify the additional capital and operating costs as part of an expansion project. However, again, if BACT requirements are expanded to other emissions units that have no associated capital expenditure, the cost impact is much greater.

The state PSD rule states that "The proposed facility (or modification) shall apply Best Available Control Technology.....". The SCC Panama City pulp production increase is not a "proposed facility", since the facility already exists. The project does include a proposed revision of a permit limit on the annual production rate of existing process equipment (the digesters). Therefore, one must again turn to the definition of "modification" to determine the meaning of this language. The state's definition of modification at Rule 62-210.200(185) is very similar to the federal definition. Specifically, the state definition excludes increases in operating hours or production rates from the term "modification", unless the increase would be prohibited under any federally enforceable NSR/PSD air construction permit condition established after January 6, 1975. Applying this reading directly to the SCC proposed project, the "modification" would not include the emission units which are not being physically modified or for which there is no change in the method of operation (i.e., the recovery boilers, smelt tanks, lime kiln, etc.).

Hence, FDEP should not require BACT to be applied to all emission units for which there is an increase in emissions associated with the "modification" -- in this case an increase in production without a physical change or change in method of operation. FDEP can continue to require emission increases "associated with" the "modification", but not part of the specific modification being requested (in this case, an increase in pulp production from the digesters), to be included in the PSD netting analysis to determine pollutants which trigger PSD review.

The State of Florida has for nearly 20 years applied its PSD regulations in a manner consistent with EPA PSD regulations, guidance and policy. This has set a legal precedent, which now cannot be changed merely by a different interpretation or policy. A formal rule change and economic impact statement would be required. Absent that, such an interpretation constitutes non-rule policy and is invalid under Section 120, Florida Statutes.

See you in a hearing

ATTACHMENT B

PCP EXCLUSION FOR MACT CONTROL PROJECTS

The applicant believes that the PCP exclusion is available for collateral pollutants generated when burning condensate stripper off-gases (SOG), or other HAP gases containing TRS, ammonia, and other compounds. Florida Administrative Code (F.A.C.), Rule 62-212.400(2)(a)2, Pollution Control Project Exemptions, reads as follows:

> "A significant net increase in the actual emissions of a collateral pollutant that would occur solely as a result of a project undertaken for the purpose of complying with the hazardous air pollutant emission reduction requirements of 40 CFR Part 63, Subpart S, adopted and incorporated by reference at Rule 62-204.800, F.A.C, shall not be subject of the preconstruction review requirements of this rule, provided...."

The wording "solely as a result of a project" is applicable to the Panama City cluster rule compliance project. The "project" includes burning SOG in the No. 3 Combination Boiler. The SOG necessarily contains total reduced sulfur (TRS) compounds and ammonia, which produce SO_2 and NO_x when combusted.

The Department's stated interpretation of the PCP exclusion is that any collateral PSD pollutants generated due to non-HAP pollutants, collected along with HAPs, are not covered under the PCP exclusion. The Department's stated interpretation of the PCP exclusion would render it ineffective. First, it would be extremely difficult to quantify the collateral emissions generated solely from HAPs collected in the stripper off-gases. The SOG contains a large percentage of methanol, but many other HAPs and non-HAPs are also present, as indicated by NCASI Technical Bulletin No. 701. These compounds include many organic species. The HAPs collected would have the potential to generate CO, VOC, and NO_x. But what amount the HAPs would contribute versus the non-HAPs contained in the same SOG is difficult, if not impossible, to determine.

Secondly, the purpose of a pollution control project exclusion is to exempt mandated projects from PSD review that are overall environmentally beneficial, but cause other PSD-regulated emissions. If such an exclusion is not provided for MACT compliance projects, the applicant is faced with not only complying with the MACT rule, but has the added burden of being subject to PSD, and the associated BACT review and other PSD requirements. This is contrary to EPA's stated intent in when it promulgated the MACT I rule.

In the preamble to the final MACT rule for the pulp and paper industry, EPA states (Federal Register, April 15, 1998, pages 18531-18533):

> "To comply with the MACT portion of the pulp and paper cluster rule, mills will route vent gases from specified pulping and condensate emission points to a combustion

control device for destruction. The incineration of these gases at kraft mills has the potential to generate sulfur dioxide and, to a lesser extent, nitrogen oxides."

This clearly indicates that EPA recognized that SO_2 emissions due to TRS compounds in the HAP-containing gas stream would occur, and that NO_x emissions would also be generated. EPA refers to the John S. Seitz memo of July 1, 1994 in its discussion, and states that in this memo EPA specifically identified the combustion of organic toxic pollutants as an example of an add-on control that could be considered a PCP. The preamble states:

> "EPA considers that combustion for the control of HAP emissions from pulping systems and condensate control systems to be a PCP, because the combustion controls are being installed to comply with the MACT and will reduce emissions of hazardous air pollutants. EPA also considers the reduction of these pollutants to represent an environmental benefit. EPA recognizes that the incidental formation of SO_2 and NO_x due to the destruction of HAPs will occur."

The Department adopted the rule allowing the PCP exemption to be applicable to the pulp and paper industry expressly for the purpose of expediting permitting of MACT compliance projects at DEP. The purpose was also to avoid the complex issues being raised in the processing of this permit for SCC Panama City. Based on the Florida rule wording, and EPA's stated purpose, the PCP should be granted for the SCC Panama City MACT control project.

Table A. Fuel Sulfur Content, Fuel Cost and SO_2 Cost Effectiveness

Fuel Type/ Sulfur Content	Unit Cost ($/gal)	Sulfur Content (% by wt.)	Heat Content (Btu/gal)	Density (lb/gal)	Cost Increase ($/gal)	SO_2 Emission Rate[a] (lb/gal)	SO_2 Emission Reduction[b] (lb/gal)	Cost Effectiveness ($/ton)[c]
No. 6 Fuel Oil								
2.4-percent sulfur	0.59	2.4	150,000	8.00	--	0.384	--	--
1.5-percent sulfur	0.62	1.5	148,000	7.80	0.03	0.234	0.150	400
1.0-percent sulfur	0.63	1.0	146,000	7.60	0.04	0.152	0.232	345
No. 2 Fuel Oil								
0.5-percent sulfur	0.72	0.5	140,000	6.83	0.13	0.068	0.316	824

Note:
1. All prices based on Coastal Fuels Marketing, Inc.'s current prices (FOB)

[a] Based on stochiometric calculation of SO_2 emissions.

[b] As compared to base case of 2.4-percent sulfur fuel oil.

[c] Does not account for any SO_2 reductions inherent in specific emission units (i.e., recovery boiler, lime kiln, etc.)

Table 1-1. 1996-1997 Baseline Emissions, Stone Container Corp., Panama City

Regulated Pollutant	No . 1 Recovery Boiler (TPY)	No . 2 Recovey Boiler (TPY)	No. 1 Smelt Dissolving Tank (TPY)	No. 2 Smelt Dissolving Tank (TPY)	Lime Kiln (TPY)	Bleach Plant (TPY)	Pulping Area (TPY)	Lime Slaker (TPY)	Woodyard (TPY)	Chemical Recovery Area (TPY)	Paper Making (TPY)	No. 3 Combination Boiler (TPY)	TOTAL BASELINE EMISSIONS (TPY)
Particulate (TSP)	185.2	160.9	69.6	97.4	98.5	--	--	1.7	41.3	--	--	--	654.6
Particulate (PM_{10})	143.7	124.9	62.3	87.2	96.8	--	--	1.7	15.0	--	--	--	531.5
Sulfur dioxide	490.4	497.1	3.7	3.8	16.4	--	--	--	--	--	--	--	1,011.4
Nitrogen oxides	272.4	276.2	7.7	7.8	156.0	--	--	--	--	--	--	75.25 [a]	795.4
Carbon monoxide	2,476.8	2,510.6	--	--	15.7	119.9	--	--	--	--	--	--	5,122.9
Volatile organic compds.	158.0	160.2	14.5	14.7	16.8	73.5	57.3	3.1	--	159.5	190.9	3.68 [b]	852.2
Sulfuric acid mist	30.0	14.0	0.23	0.23	1.0	--	--	--	--	--	--	--	45.5
Total Reduced Sulfur	28.4	34.6	2.6	3.1	9.4	4.7	70.0	--	--	14.4	--	--	167.3
Lead	0.020	0.020	0.0040	0.0040	0.271	--	--	--	--	--	--	--	0.32
Mercury	0.015	0.015	4.21E-05	4.26E-05	6.48E-04	--	--	--	--	--	--	--	0.0309
Beryllium	5.18E-04	5.25E-04	3.27E-05	3.32E-05	1.21E-03	--	--	--	--	--	--	--	0.0023
Fluorides	--	--	--	--	--	--	--	--	--	--	--	--	--

[a] Represents emissions due to current permitted pulp production limit of 668,850 TPY ADUP.

[b] Represents VOC emissions due to condensate stripper off-gas at current permitted pulp production limit of 668,850 TPY.

Table 1-2. Maximum Future Potential Emissions at 781,000 TPY Pulp Production, Stone Container Corp., Panama City

Regulated Pollutant	No . 1 Recovery Boiler (TPY)	No . 2 Recovey Boiler (TPY)	No. 1 Smelt Dissolving Tank (TPY)	No. 2 Smelt Dissolving Tank (TPY)	Lime Kiln (TPY)	Bleach Plant (TPY)	Pulping Area (TPY)	Lime Slaker (TPY)	Woodyard (TPY)	Chemical Recovery Area (TPY)	Paper Making (TPY)	No. 3 Combination Boiler (TPY)	TOTAL FUTURE POTENTIAL (TPY)
Particulate (TSP)	309.1	309.1	54.2	54.2	130.7	--	--	17.5	44.6	--	--	--	919.3
Particulate (PM_{10})	239.8	239.8	48.5	48.5	128.4	--	--	17.5	16.4	--	--	--	739.0
Sulfur dioxide	568.4	568.4	4.3	4.3	20.6	--	--	--	--	--	--	--	1,166.1
Nitrogen oxides	315.8	315.8	8.9	8.9	195.7	--	--	--	--	--	--	87.86	933.0
Carbon monoxide	2,872.0	2,872.0	--	--	19.7	177.3	--	--	--	--	--	--	5,941.0
Volatile organic compds.	183.2	183.2	16.8	16.8	21.1	96.7	70.3	5.4	--	193.8	234.3	4.30 [a]	1,025.9
Sulfuric acid mist	34.8	34.8	0.27	0.27	1.3	--	--	--	--	--	--	--	71.4
Total Reduced Sulfur	75.9	75.9	13.0	13.0	31.9	6.3	85.9	--	--	16.4	--	--	318.3
Lead	0.023	0.023	0.0050	0.0050	0.34	--	--	--	--	--	--	--	0.40
Mercury	0.017	0.017	4.90E-05	4.90E-05	8.10E-04	--	--	--	--	--	--	--	0.0349
Beryllium	6.00E-04	6.00E-04	3.80E-05	3.80E-05	1.50E-03	--	--	--	--	--	--	--	0.00278
Fluorides	--	--	--	--	--	--	--	--	--	--	--	--	--

[a] Based on baseline VOC emissions (See Table 1-1) times ratio of 781,000 / 668,850 TPY ADUP.

Table 1-3. Net Change in Emissions Due to Proposed Pulp Production of 781,000 TPY
Stone Container Corp., Panama City

Regulated Pollutant	1996-1997 BASELINE EMISSIONS (TPY)	FUTURE POTENTIAL EMISSIONS (TPY)	NET CHANGE (TPY)	SIGNIFICANT EMISSION RATE (TPY)	PSD REVIEW APPLIES ?
Particulate (TSP)	654.6	919.3	264.6	25	Yes
Particulate (PM_{10})	531.5	739.0	207.4	15	Yes
Sulfur dioxide	1,011.4	1,166.1	154.6	40	Yes
Nitrogen oxides	795.4	933.0	137.6	40	Yes
Carbon monoxide	5,122.9	5,941.0	818.1	100	Yes
Volatile organic compds.	852.2	1,025.9	173.7	40	Yes
Sulfuric acid mist	45.5	71.4	26.0	7	Yes
Total Reduced Sulfur	167.3	318.3	151.0	10	Yes
Lead	0.32	0.40	0.078	0.6	No
Mercury	0.0309	0.0349	0.004	0.1	6.48E-04
Beryllium	0.0005	0.00278	0.00226	0.00040	Yes
Fluorides	--	--	--	3	No

Table A-1. Maximum Emissions from Each Recovery Boiler Nos. 1 and 2 , Stone Container Corporation, Panama City

Regulated Pollutant	Emission Factor	Reference	Activity Factor [a]	Hourly Emissions (lb/hr)	Annual Emissions (TPY)
			Each Recovery Boiler		
Particulate (PM)	0.044 gr/dscf	1	187,100 dscfm [b]	70.6	309.1
Particulate (PM_{10})	77.6 % of PM	6	--	54.76	239.8
Sulfur dioxide	0.18 lb/MMBtu	3	721 MMBtu/hr	129.78	568.4
Nitrogen oxides	0.10 lb/MMBtu	3	721 MMBtu/hr	72.10	315.8
Carbon monoxide	20 lb/1,000 lb BLS	7	123.7 1,000 lb BLS/hr	2,474	2,872
VOC	0.058 lb C /MMBtu	3	721 MMBtu/hr	41.82	183.2
Sulfuric acid mist	0.011 lb/MMBtu	5	721 MMBtu/hr	7.95	34.8
Total reduced sulfur	17.5 ppmvd	8	187,100 dscfm (b)	17.3	75.9
Lead	7.2E-06 lb/MMBtu	2	721 MMBtu/hr	5.2E-03	2.3E-02
Mercury	5.5E-06 lb/MMBtu	2	721 MMBtu/hr	4.0E-03	1.7E-02
Beryllium	1.9E-07 lb/MMBtu	2	721 MMBtu/hr	1.4E-04	6.0E-04
Fluorides	ND	4	--	--	--

[a] Based on currently permitted maximum operating rate of 123,700 lb virgin BLS/hr, 5,830 Btu/lb BLS, and 8,760 hr/yr.

[b] Based on 1997 compliance testing. Flow rate is corrected to 8-percent oxygen.

References:

1. Proposed MACT standard.
2. Emission factor based on NCASI Bulletin No. 650, Table 11D, direct contact evaporator, average factor used.
3. Emission factor based on NCASI Bulletin No. 646, Tables 8-11, direct contact evaporator with ESP, average factor used.
4. From "Application of Combustion Modifications to Industrial Combustion Equipment" EPA-600/7-79-015a. one test from recovery boiler.
5. Based on similar derivation of sulfuric acid mist from AP-42 for fuel oil. 5 percent of SO_2 becomes SO_3 then take into account the ratio of sulfuric acid mist and gaseous sulfate molecular weights (98/80).
6. Based on AP-42 Tables 10.2-1, 10.2-2, and Figure 10.2-2 for Kraft pulping sources.

8. Currently permitted emission limit.

Table A-4. Maximum Emissions from No. 1 Smelt Dissolving Tank at Stone Container, Panama City.

Regulated Pollutant	Emission Factor	Reference	Activity Factor [a]	Hourly Emissions (lb/hr)	Annual Emissions (TPY)
Particulate (PM)	0.20 lb/ton BLS	1	61.85 tons BLS/hr	12.4	54.2
Particulate (PM_{10})	89.5 % of PM	2	--	11.1	48.5
Sulfur dioxide	0.016 lb/ton BLS	3	61.85 tons BLS/hr	0.99	4.3
Nitrogen oxides	0.033 lb/ton BLS	3	61.85 tons BLS/hr	2.04	8.9
Carbon monoxide	--		--	--	--
VOC	0.062 lb/ton BLS	3	61.85 tons BLS/hr	3.83	16.8
Sulfuric acid mist	5 % of SO2	5	--	0.061	0.3
Total reduced sulfur	0.048 lb/ton BLS	6	61.85 tons BLS/hr	3.0	13.0
Lead	1.7E-05 lb/ton BLS	4	61.85 tons BLS/hr	0.001	4.6E-03
Mercury	1.8E-07 lb/ton BLS	4	61.85 tons BLS/hr	1.1E-05	4.9E-05
Beryllium	1.4E-07 lb/ton BLS	4	61.85 tons BLS/hr	8.7E-06	3.8E-05
Fluorides	--		--	--	--

[a] Based on the currently permitted maximum allowable operating rate of 123,700 lb virgin BLS/hr and 8,760 hr/yr.

References:

1. Proposed MACT standard.
2. AP-42, Table 10.2-7.
3. Data is averages from NCASI Bulletin No. 646, Tables 16-18, for smelt dissolving tanks with scrubbers.
4. Data is averages from NCASI Bulletin No. 650, Tables 14A and 14B, for smelt dissolving tanks with scrubbers.
5. Based on similar derivation of sulfuric acid mist from AP-42 for fuel oil. 5% of SO2 becomes SO3 then take into account the ratio of sulfuric acid mist and gaseous sulfate molecular weights (98/80).
6. Based on Rule 62-296.404(3)(d)1., F.A.C

Table A-5. Maximum Emissions from No. 2 Smelt Dissolving Tank at Stone Container, Panama City.

Regulated Pollutant	Emission Factor	Reference	Activity Factor [a]	Hourly Emissions (lb/hr)	Annual Emissions (TPY)
Particulate (PM)	0.20 lb/ton BLS	1	61.85 tons BLS/hr	12.4	54.2
Particulate (PM_{10})	89.5 % of PM	2	--	11.1	48.5
Sulfur dioxide	0.016 lb/ton BLS	3	61.85 tons BLS/hr	0.99	4.3
Nitrogen oxides	0.033 lb/ton BLS	3	61.85 tons BLS/hr	2.04	8.9
Carbon monoxide	--		--	--	--
VOC	0.062 lb/ton BLS	3	61.85 tons BLS/hr	3.83	16.8
Sulfuric acid mist	5 % of SO2	5	--	0.061	0.3
Total reduced sulfur	0.048 lb/ton BLS	6	61.85 tons BLS/hr	3.0	13.0
Lead	1.7E-05 lb/ton BLS	4	61.85 tons BLS/hr	0.001	4.6E-03
Mercury	1.8E-07 lb/ton BLS	4	61.85 tons BLS/hr	1.1E-05	4.9E-05
Beryllium	1.4E-07 lb/ton BLS	4	61.85 tons BLS/hr	8.7E-06	3.8E-05
Fluorides	--		--	--	--

[a] Based on the currently permitted maximum allowable operating rate of 123,700 lb virgin BLS/hr and 8,760 hr/yr.

References:
1. Proposed MACT standard.
2. AP-42, Table 10.2-7.
3. Data is averages from NCASI Bulletin No. 646, Tables 16-18, for smelt dissolving tanks with scrubbers.
4. Data is averages from NCASI Bulletin No. 650, Tables 14A and 14B, for smelt dissolving tanks with scrubbers.
5. Based on similar derivation of sulfuric acid mist from AP-42 for fuel oil. 5% of SO2 becomes SO3 then take into account the ratio of sulfuric acid mist and gaseous sulfate molecular weights (98/80).
6. Currently permitted emission limit.

Table A-7. Maximum Emissions from Lime Kiln (No. 6 Fuel Oil Fired) at Stone Container, Panama City.

Regulated Pollutant	Emission Factor	Reference	Activity Factor [a]	Hourly Emissions (lb/hr)	Annual Emissions (TPY)
Particulate (PM)	29.83 lb/hr	1	8,760 hr/yr	29.83	130.7
Particulate (PM_{10})	98.3 % of PM	2	--	29.32	128.4
Sulfur dioxide	0.23 lb/ton CaO	4	20.4 ton CaO/hr	4.69	20.6
Nitrogen oxides	2.19 lb/ton CaO	4	20.4 ton CaO/hr	44.68	195.7
Carbon monoxide	0.22 lb/ton CaO	6	20.4 ton CaO/hr	4.49	19.7
VOC	0.24 lb C/ton CaO	4	20.4 ton CaO/hr	4.81	21.1
Sulfuric acid mist	0.014 lb/ton CaO	5	20.4 ton CaO/hr	0.29	1.3
Total reduced sulfur	20 ppmvd [b]	7	68,000 dscfm [c]	7.27	31.9
Lead	3.8E-03 lb/ton CaO	3	20.4 ton CaO/hr	7.8E-02	0.3
Mercury	9.1E-06 lb/ton CaO	3	20.4 ton CaO/hr	1.9E-04	0.0
Beryllium	1.7E-05 lb/ton CaO	3	20.4 ton CaO/hr	3.5E-04	0.0
Fluorides	--		--	--	--

[a] Based on currently permitted operating limit of 18.35 tons CaO/hr plus 10% impurities (20.4 tons/hr), 8,760 hr/yr.

[b] TRS Emission Factor as H2S corrected to 10% O2 as a 12-hour average.

[c] Flow rate corrected to 10% oxygen.

References

1. Based on current permit limit, which is lower than the proposed MACT standard of 0.067gr/dscf @ 10% O_2.
2. Based on AP-42 Section 10.2 and Tables 10.2-1 and 10.2-4.
3. Based on NCASI Technical Bulletin No. 650, Table 13C.
4. Based on NCASI Technical Bulletin No. 646, Tables 12-14.
5. Based on similar derivation of sulfuric acid mist from AP-42 for fuel oil. 5% of SO2 becomes SO3 then take into account the ratio of sulfuric acid mist and gaseous sulfate molecular weights (98/80).
6. Based on NCASI Technical Bulletin No. 416, Table 6.
7. Currently permitted emission limit.

Smurfit-Stone

Containerboard Mill Division

06/14/00

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

Re: DEP File No. 00500009-005-AC (PSD-FL-288)
Pulp Production Increase

Dear Mr. Fancy

The purpose of this letter is to request that FDEP expedite the Stone Container Corporation, Panama City Paper Mills' PSD application. We have just replied to the most recent FDEP data request, to Mr. Linero. Due to the fact that half of the year has essentially gone by, the mill is growing increasingly concerned that the permit may not be issued by the end of the year. We also recognize that we are responsible for some of the delays.

The mill has been running extremely well to date. Without the increased production allowed by the new permit, we may be forced to curtail operations near the end of the year, and lay off approximately 600 employees, with resultant effect on our community.

Is there anything that can be done to expedite the PSD process? We are committed to as rapid a response to any future FDEP data request as possible. If it is feasible for you to request information as the need arises, instead of waiting to compile the requests in a letter, it may also help speed the process. Such informal correspondence could always be formalized at a later date if necessary. We are also prepared to meet with you or your staff as frequently as necessary in order to speed the process up.

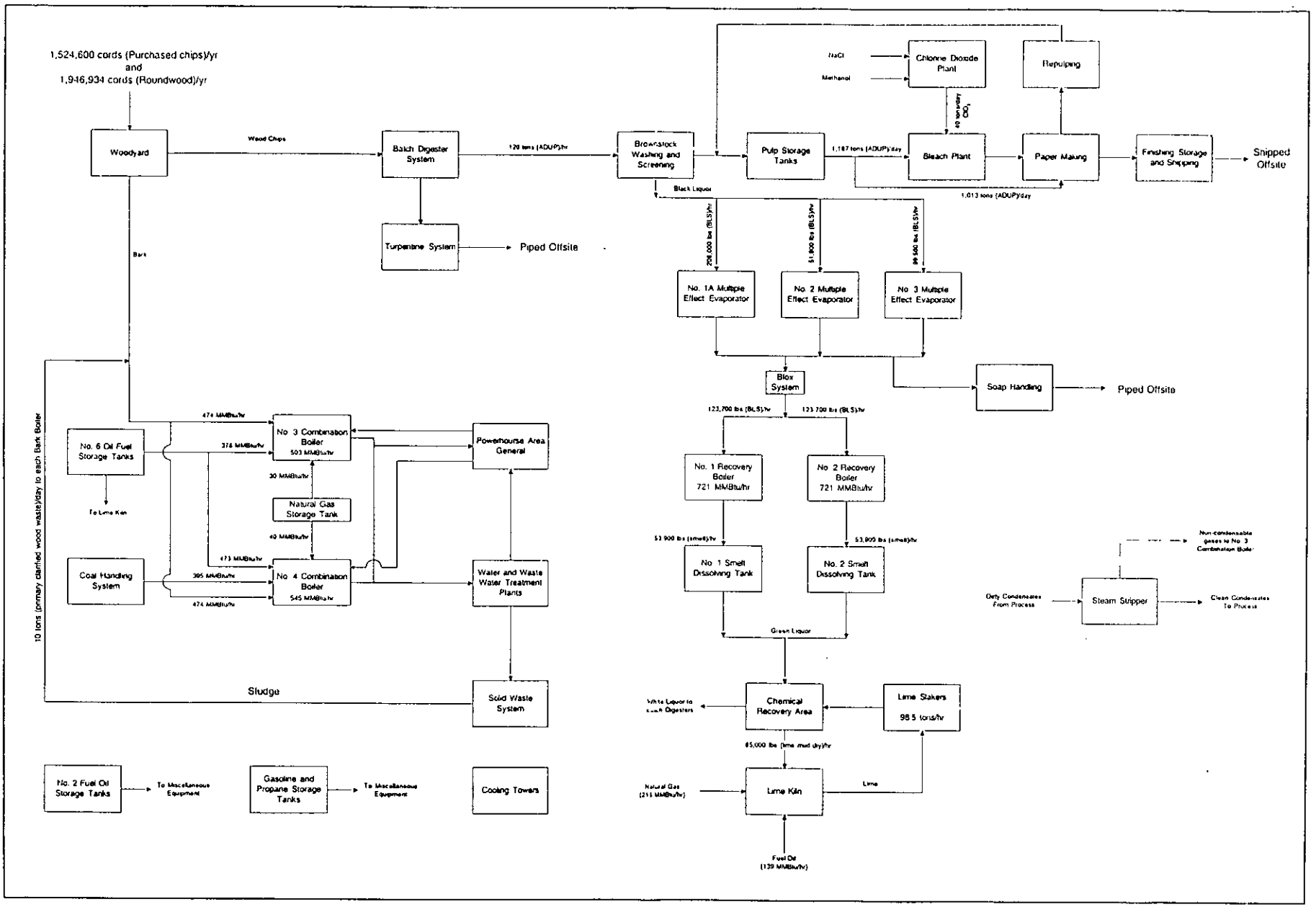
If there are any other actions that can be taken to expedite the review and issuance of the PSD permit, please call me at (850) 785-4311 ext. 470, or e-mail me at TLCLEMENTS@SMURFIT.COM

Sincerely

Thomas L. Clements
Environmental Superintendent
Panama City Mill

cc: Syed Arif

Smurfit-Stone Container Corporation
1 Everitt Avenue 32401 P.O. Box 59560 32412-0560 Panama City, FL Phone (850) 785-4311 Fax (850) 763-6290



Stone Container Corporation		Emission Unit: Facility Process Area: Overall Plant Flow Diagram Filename: 9937518Y/F1/WP/SCC-FAC.VSD Latest Revision Date: 6/7/00 5:29 PM	Golder Associates
SCC-FI-C3	Panama City, FL		

II. Summary and discussion of results

No. 3 BB 1999

Results of the testing are summarized in Table I. Complete emissions data along with supportive field and analytical data are included in Appendices A, B, C, and F.

The No. 3 Bark Boiler was within compliance during the test. The average particulate emissions were 47.62 lbs/hr. The calculated allowable emissions for this source are 75.58 lbs/hr.

The visible emissions average opacity was 5.6%, with an allowable of 30%.

T S I

Volumetric Flow and Emission Output - Table I

FACILITY: Stone Container
LOCATION: Panama City, Fl.

SOURCE: No. 3 Bark Boiler

Date	Run Number	Particulate Emissions GR/SCF	LB/HR	LB/MMBTU	Vol. Flow Rate ACFM	SCFMD	Percent O2	Stack Temp 'F	Percent Isokinetic
11/8/99	1	0.0282	42.01	0.068	219577.0	173806.0	9.1	124.7	92.9
11/8/99	2	0.0368	54.38	0.093	221702.0	172388.0	9.5	127.7	90.1
11/8/99	3	0.0312	46.48	0.075	223789.0	173804.0	8.9	128.4	91.1
	Mean	0.0321	47.62	0.079	221689.3	173332.7	9.2	126.9	91.4

Mean determined as arithmetic average of the results for each of the three runs.

REMARKS: Allowable Emissions = 75.58 lbs/hr

LB/MMBTU = (Gr/SCF/7000) x (Fuel Fact.) x [20.9 / (20.9 - %O2)]

II. Summary And Discussion Of Results

NO. 4 BARK BOILER 1999

Results of these tests are summarized in Tables I through IV. Complete emissions data along with the supporting field and analytical data are included in Appendices A through L.

This unit is within compliance limitations for the required parameters. The allowable emissions and the measured emissions are listed below:

Parameter	Allowable Emissions	Measured Emissions
Particulate Matter	80.64 Lbs/Hr	18.34 Lbs/Hr
Sulfur Dioxide (Wiithout NCG)	772 Lbs/Hr	539.9 Lbs/Hr
Sulfur Dioxide (Wiith NCG)	781 Lbs/Hr	12.15 Lbs/Hr
Total Reduced Sulfur Gases (Wiith NCG)	5.0 PPM	0.03 PPM
Visible Emissions	30%	6.46 %

T S I

Volumetric Flow and Emission Output - Table I

FACILITY: Smurfit-Stone Container Corp.
LOCATION: Panama City, Fl.

SOURCE: No. Bark Boiler

Date	Run Number	Particulate Emissions GR/SCF	LB/HR	LB/MMBTU	Vol. Flow Rate ACFM	SCFMD	Percent O2	Stack Temp 'F	Percent Isokinetic
11/5/99	1	0.0165	23.63	0.036	232844.0	167094.0	7.9	140.2	94.8
11/5/99	2	0.0137	18.54	0.029	223437.0	157881.0	7.5	142.0	98.8
11/5/99	3	0.0097	12.86	0.021	217461.0	154687.0	8.0	141.0	97.7
	Mean	0.0133	18.34	0.029	224580.7	159887.3	7.8	141.1	97.1

Mean determined as arithmetic average of the results for each of the three runs.

REMARKS: Allowable Emissions = 80.64 lbs/hr

LB/MMBTU = (Gr/SCF/7000) x (Fuel Fact.) x [20.9 / (20.9 - %O2)]

TABLE II
SULFUR DIOXIDE EMISSION SUMMARY
NO. 4 BARK BOILER WITH NCG
STONE CONTAINER CORPORATION
PANAMA CITY, FLORIDA

DATE	TIME	LEVEL	SULFUR DIOXIDE PPM	VOLUMETRIC FLOW SCFM	MASS EMISSIONS LB/SCF	LB / HR
11/06/99	0930 - 1030	MAX	13.10		2.175E-06	21.495
		MIN	5.50		9.130E-07	9.025
		AVG	8.06	164741	1.339E-06	13.231
11/06/99	1045 - 1145	MAX	16.20		2.689E-06	25.593
		MIN	3.60		5.976E-07	5.687
		AVG	8.32	158614	1.382E-06	13.150
11/06/99	1215 - 1315	MAX	12.20		2.025E-06	19.344
		MIN	1.80		2.988E-07	2.854
		AVG	6.35	159197	1.055E-06	10.075
	MEAN		7.58	160851	1.258E-06	12.152

SCFM = Standard Cubic feet per minute. Standard conditions are dry, 68 F and 29.92 Hg.

LBS / HR = ppm * 1.660E-07 * 60 min / hr * SCFM

TABLE III
SULFUR DIOXIDE EMISSION SUMMARY
NO. 4 BARK BOILER WITHOUT NCG
STONE CONTAINER CORPORATION
PANAMA CITY, FLORIDA

DATE	TIME	LEVEL	SULFUR DIOXIDE PPM	VOLUMETRIC FLOW SCFM	MASS EMISSIONS LB/SCF	LB / HR
11/05/99	0915 - 1015	MAX	454.4		7.543E-05	756.277
		MIN	346.0		5.743E-05	575.812
		AVG	405.8	167094	6.736E-05	675.287
11/05/99	1035 - 1135	MAX	322.5		5.353E-05	507.063
		MIN	301.6		5.007E-05	474.289
		AVG	312.3	157881	5.184E-05	491.056
11/05/99	1225 - 1325	MAX	339.3		5.633E-05	522.807
		MIN	231.3		3.839E-05	356.322
		AVG	294.3	154687	4.885E-05	453.415
	MEAN		337.4	159887	5.602E-05	539.919

SCFM = Standard Cubic feet per minute. Standard conditions are dry, 68 F and 29.92 Hg.

LBS / HR = ppm * 1.660E-07 * 60 min / hr * SCFM

TECHNICAL SERVICES INC.

TABLE IV

TOTAL REDUCED SULFUR GAS EMISSIONS
Bark Boiler No. 4 w/NCG

Smurfit-Stone Container Corporation
Smurfit-Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS, PPM H2S	CH3SH	DMS	DMDS	TRS
11/06/99	1	0900 - 1200	MAX	0.21	0.00	0.00	0.00	0.21
			MIN	0.00	0.00	0.00	0.00	0.00
			AVG	0.04	0.00	0.00	0.00	0.04
11/06/99	2	1200 - 1500	MAX	0.12	0.00	0.00	0.00	0.12
			MIN	0.00	0.00	0.00	0.00	0.00
			AVG	0.04	0.00	0.00	0.00	0.04
11/06/99	3	1500 - 1800	MAX	0.08	0.00	0.00	0.00	0.08
			MIN	0.00	0.00	0.00	0.00	0.00
			AVG	0.01	0.00	0.00	0.00	0.01
			MEAN	0.03	0.00	0.00	0.00	0.03

PPM - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercaptan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds
* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE IV

TOTAL REDUCED SULFUR GAS EMISSIONS
Bark Boiler No. 4 w/NCG

Smurfit-Stone Container Corporation
Smurfit-Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS, PPM H2S	CH3SH	DMS	DMDS	TRS
11/06/99	1	0900 - 1200	MAX	0.21	0.00	0.00	0.00	0.21
			MIN	0.00	0.00	0.00	0.00	0.00
			AVG	0.04	0.00	0.00	0.00	0.04
11/06/99	2	1200 - 1500	MAX	0.12	0.00	0.00	0.00	0.12
			MIN	0.00	0.00	0.00	0.00	0.00
			AVG	0.04	0.00	0.00	0.00	0.04
11/06/99	3	1500 - 1800	MAX	0.08	0.00	0.00	0.00	0.08
			MIN	0.00	0.00	0.00	0.00	0.00
			AVG	0.01	0.00	0.00	0.00	0.01
			MEAN	0.03	0.00	0.00	0.00	0.03

PPM - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercaptan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds
* Mean determined as arithmetic average of the average results for each of the runs

II. Summary And Discussion Of Results

SLAKER VENT 1999

Results of these tests are summarized in Table I. Complete emissions data along with the supporting field and analytical data are included in Appendices A through F.

This unit is within compliance limitations for the required parameters. The allowable emissions and the measured emissions are listed below:

Parameter	Allowable Emissions	Measured Emissions
Particulate Matter	48.52 Lbs/Hr	1.26 Lbs/Hr
Visible Emissions	20%	0.00 %

T S I

Volumetric Flow and Emission Output - Table I

FACILITY: Smurfit-Stone Container Corp.
LOCATION: Panama City, Fl

SOURCE: Slaker Vent Stack

Date	Run Number	Particulate Emissions GR/SCF	LB/HR	Vol. Flow Rate ACFM	SCFMD	Percent O2	Stack Temp 'F	Percent H20	Percent Isokinetic
11/4/99	1	0.0404	1.23	7873.0	3566.0	20.9	177.5	46.1	102.4
11/4/99	2	0.0496	1.57	7805.0	3691.0	20.9	174.4	44.0	96.2
11/4/99	3	0.0309	0.96	7838.0	3637.0	20.9	175.0	45.0	98.1
	Mean	0.0403	1.26	7838.7	3631.3	20.9	175.6	45.0	98.9

Mean determined as arithmetic average of the results for each of the three runs.

REMARKS: Allowable Emissions = [55 x (Tons/hr)^0.11] - 40 = lbs/hr
= [55 x (75.70 tph^0.11] - 40 = 48.52 lbs/hr

Note: Calculations for the Tons/hr can be found in the process data in Appendix D

II. Summary And Discussion Of Results

LIME KILN 1999

Results of these tests are summarized in Tables I through III. Complete emissions data along with the supporting field and analytical data are included in Appendices A through J.

This unit is within compliance limitations for the required parameters. The allowable emissions and the measured emissions are listed below:

Parameter	Allowable Emissions	Measured Emissions
Particulate Matter	31.63 Lbs/Hr	28.77 Lbs/Hr
Total Reduced Sulfur (TRS)	20 8 PPM @ 10% O2	0.71 PPM @ 10% O2
Visible Emissions	20%	0.0 %

T S I

Volumetric Flow and Emission Output - Table I

FACILITY: Smurfit-Stone Container Corp.
LOCATION: Panama City, Fl.

SOURCE: Lime Kiln

Date	Run Number	Particulate Emissions GR/SCF	Particulate Emissions LB/HR	Vol. Flow Rate ACFM	Vol. Flow Rate SCFMD	Percent O2	Stack Temp 'F	Percent H20	Percent Isokinetic
11/12/99	1	0.0570	28.18	106539.0	57674.0	6.3	167.2	36.1	95.4
11/12/99	2	0.0539	25.98	100862.0	56230.0	5.6	167.1	34.2	101.7
11/12/99	3	0.0620	32.17	105127.0	60530.0	5.1	169.3	31.8	107.1
	Mean	0.0576	28.77	104176.0	58144.7	5.6	167.9	34.0	101.4

Mean determined as arithmetic average of the results for each of the three runs.

REMARKS: Allowable Emissions = 17.31(P)^0.16 = lbs/hr
= 31.63 lbs/hr @ 43.28 tons/hr process feed

TECHNICAL SERVICES INC.

TABLE II

TOTAL REDUCED SULFUR GAS EMISSIONS
LIME KILN

Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS, PPM H2S	CH3SH	DMS	DMDS	TRS
11/12/99	1	0900 - 1200	MAX	1.49	0.00	0.00	0.00	1.49
			MIN	0.64	0.00	0.00	0.00	0.64
			AVG	0.98	0.00	0.00	0.00	0.98
11/12/99	2	1200 - 1500	MAX	3.17	0.00	0.00	0.00	3.17
			MIN	0.47	0.00	0.00	0.00	0.47
			AVG	0.85	0.00	0.00	0.00	0.85
11/12/99	3	1500 - 1800	MAX	1.76	0.00	0.00	0.00	1.76
			MIN	0.41	0.00	0.00	0.00	0.41
			AVG	1.20	0.00	0.00	0.00	1.20
			MEAN	1.01	0.00	0.00	0.00	1.01

PPM - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercaptan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds
* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE IV

TOTAL REDUCED SULFUR GAS EMISSIONS SUMMARY
Recovery Boiler 1B

Smurfit-Stone Container Corporation
Smurfit-Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	OXYGEN %	CONCENTRATIONS, PPM TRS	TRS / COR. FOR O2
11/08/99	1	1300 - 1600	MAX	7.89	4.92	4.88
			MIN	7.85	1.96	1.93
			AVG	7.87	3.38	3.35
11/08/99	2	1600 - 1900	MAX	7.89	4.51	4.48
			MIN	7.57	2.78	2.69
			AVG	7.76	3.48	3.41
11/08/99	3	1900 - 2200	MAX	8.08	11.74	11.80
			MIN	7.72	2.91	2.85
			AVG	7.89	5.24	5.19
			MEAN	7.84	4.03	3.99

PPM - Parts per million by volume
* Mean determined as arithmetic average of the average results for each of the runs

T S I

Volumetric Flow and Emission Output - Table V

FACILITY: Smurfit-Stone Container Corp.
LOCATION: Panama City, Florida

SOURCE: No. 1 Recovery Boiler System

Date	Run Number	Source Recoverys	Particulate Emissions LB/HR	Particulate Emissions LB/Ton BLS	Vol. Flow Rate ACFM	Vol. Flow Rate SCFMD	Black Liquor Firing Rate (Tons/Hr)	Percent Isokinetic
11/2/99	1	1A	19.93	1.02	169506.0	85479.0	39.24 /2	102.4
11/2/99	2	1A	19.13	0.97	169053.0	82369.0	39.41 /2	109.2
11/2/99	3	1A	24.78	1.26	168778.0	86551.0	39.33 /2	107.8
		Mean	21.28	1.08	169112.3	84799.7	39.33 /2	106.5
11/2/99	1	1B	3.52	0.18	153259.0	79053.0	39.32 /2	107.0
11/2/99	2	1B	6.68	0.34	153508.0	79564.0	39.44 /2	106.3
11/2/99	3	1B	5.17	0.26	166369.0	88628.0	39.61 /2	104.3
		Mean	5.13	0.26	157712.0	82415.0	39.46 /2	105.8
		Total	26.41	0.67	326824.3	167214.7	39.39	

Mean determined as arithmetic average of the results for each of the three runs.

REMARKS: Allowable Emissions (Stacks A and B) = 3.0 lbs/Ton Black Liquor Solids
One Ton BLS = 3000 lbs

TECHNICAL SERVICES INC.

TABLE I

TOTAL REDUCED SULFUR GAS EMISSIONS
Recovery Boiler 1A

Smurfit-Stone Container Corp.
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS. PPM H2S	CH3SH	DMS	DMDS	TRS
11/08/99	1	0900 - 1200	MAX	5.15	2.89	0.00	0.65	9.33
			MIN	2.37	1.41	0.00	0.00	3.78
			AVG	4.18	2.55	0.00	0.12	6.97
11/08/99	2	1200 - 1500	MAX	10.22	3.69	0.00	0.49	14.89
			MIN	4.12	2.28	0.00	0.05	6.49
			AVG	5.08	3.04	0.00	0.12	8.36
11/08/99	3	1500 - 1800	MAX	6.96	4.12	0.00	0.09	11.27
			MIN	4.32	2.47	0.00	0.06	6.91
			AVG	5.94	3.39	0.00	0.00	9.33
			MEAN	5.06	2.99	0.00	0.08	8.22

PPM - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercaptan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds
* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE II

TOTAL REDUCED SULFUR GAS EMISSIONS SUMMARY
Recovery Boiler 1A

Smurfit-Stone Container Corp.
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	OXYGEN %	CONCENTRATIONS, PPM TRS	TRS / COR. FOR O2
11/08/99	1	0900 - 1200	MAX	6.39	9.33	8.30
			MIN	6.33	3.78	3.35
			AVG	6.36	6.97	6.19
11/08/99	2	1200 - 1500	MAX	6.09	14.89	12.98
			MIN	5.99	6.49	5.62
			AVG	6.03	8.36	7.26
11/08/99	3	1500 - 1800	MAX	6.18	11.27	9.89
			MIN	6.04	6.91	6.01
			AVG	6.11	9.33	8.14
			MEAN	6.17	8.22	7.20

PPM - Parts per million by volume
* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE III

TOTAL REDUCED SULFUR GAS EMISSIONS
Recovery Boiler 1B

Smurfit-Stone Container Corporation
Smurfit-Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS. PPM H2S	CH3SH	DMS	DMDS	TRS
11/08/99	1	1300 - 1600	MAX	2.01	2.08	0.00	0.42	4.92
			MIN	1.02	0.94	0.00	0.00	1.96
			AVG	1.49	1.68	0.00	0.11	3.38
11/08/99	2	1600 - 1900	MAX	2.14	2.14	0.00	0.11	4.51
			MIN	1.07	1.54	0.00	0.08	2.78
			AVG	1.47	1.82	0.00	0.09	3.48
11/08/99	3	1900 - 2200	MAX	3.99	7.58	0.00	0.08	11.74
			MIN	1.08	1.69	0.00	0.07	2.91
			AVG	2.56	2.67	0.00	0.00	5.24
			MEAN	1.84	2.06	0.00	0.07	4.03

PPM - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercaptan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds
* Mean determined as arithmetic average of the average results for each of the runs

No. 2 Recovery
1999

II. Summary And Discussion Of Results

NO. 2 RECOVERY BOILER

Results of these tests are summarized in Tables I through V. Complete emissions data along with the supporting field and analytical data are included in Appendices A through E and H.

Both stacks for this unit are well within compliance limitations. The allowable emissions and the measured emissions are listed below:

Parameter	Allowable Emissions	Measured Emissions
Particulate Matter	3.0 lbs/Ton BLS (Both stacks combined)	0.70 lb/Ton BLS
Total Reduced Sulfur (TRS)	17.5 PPM @ 8% O2	13.79 PPM @ 8% O2 (Stack 2A)
Total Reduced Sulfur (TRS)	17.5 PPM @ 8% O2	14.28 PPM @ 8% O2 (Stack 2B)
Total Reduced Sulfur (TRS)	17.5 PPM @ 8% O2	14.04 PPM @ 8% O2 (Average both stacks)
Visible Emissions	45%	3.75 % (Stack 2A)
Visible Emissions	45%	3.54 % (Stack 2B)

TECHNICAL SERVICES INC.

TABLE I

TOTAL REDUCED SULFUR GAS EMISSIONS
Recovery Boiler 2A

Smurfit-Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS. PPM H2S	CH3SH	DMS	DMDS	TRS
11/09/99	1	1300 - 1600	MAX	16.75	6.29	0.00	0.62	24.28
			MIN	12.10	4.54	0.00	0.00	16.64
			AVG	14.90	5.28	0.00	0.12	20.43
11/09/99	2	1600 - 1900	MAX	11.41	5.01	0.00	0.11	16.64
			MIN	7.81	3.80	0.00	0.00	11.60
			AVG	9.30	4.21	0.00	0.08	13.67
11/09/99	3	1900 - 2200	MAX	24.88	4.21	0.00	0.10	29.28
			MIN	3.94	3.60	0.00	0.00	7.54
			AVG	9.49	3.89	0.00	0.00	13.38
			MEAN	11.23	4.46	0.00	0.07	15.82

PPM - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercaptan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds
* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE II

TOTAL REDUCED SULFUR GAS EMISSIONS SUMMARY
Recovery Boiler 2A

Smurfit-Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	OXYGEN %	CONCENTRATIONS, PPM TRS	TRS / COR. FOR O2
11/09/99	1	1300 - 1600	MAX	5.90	24.28	20.90
			MIN	5.51	16.64	13.97
			AVG	5.71	20.43	17.36
11/09/99	2	1600 - 1900	MAX	6.38	16.64	14.79
			MIN	6.04	11.60	10.08
			AVG	6.24	13.67	12.04
11/09/99	3	1900 - 2200	MAX	6.65	29.28	26.52
			MIN	6.28	7.54	6.66
			AVG	6.47	13.38	11.97
			MEAN	6.14	15.82	13.79

PPM - Parts per million by volume
* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE IV

TOTAL REDUCED SULFUR GAS EMISSIONS SUMMARY
Recovery Boiler 2B

Smurfit-Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	OXYGEN %	CONCENTRATIONS, PPM TRS	TRS / COR. FOR O2
11/10/99	1	1300 - 1600	MAX	5.08	21.60	17.64
			MIN	5.06	9.45	7.71
			AVG	5.07	13.14	10.73
11/10/99	2	1600 - 1900	MAX	5.01	19.31	15.70
			MIN	4.78	11.64	9.32
			AVG	4.90	14.48	11.69
11/10/99	3	1900 - 2200	MAX	5.05	18.13	14.77
			MIN	4.91	4.96	4.01
			AVG	4.96	15.21	12.32
			MEAN	4.98	14.28	11.58

PPM - Parts per million by volume
* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE IV

TOTAL REDUCED SULFUR GAS EMISSIONS SUMMARY
Recovery Boiler 2B

Smurfit-Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	OXYGEN %	CONCENTRATIONS, PPM TRS	TRS / COR. FOR O2
11/10/99	1	1300 - 1600	MAX	5.08	21.60	17.64
			MIN	5.06	9.45	7.71
			AVG	5.07	13.14	10.73
11/10/99	2	1600 - 1900	MAX	5.01	19.31	15.70
			MIN	4.78	11.64	9.32
			AVG	4.90	14.48	11.69
11/10/99	3	1900 - 2200	MAX	5.05	18.13	14.77
			MIN	4.91	4.96	4.01
			AVG	4.96	15.21	12.32
			MEAN	4.98	14.28	11.58

PPM - Parts per million by volume
* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE III

TOTAL REDUCED SULFUR GAS EMISSIONS
Recovery Boiler 2B

Smurfit-Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS. PPM H2S	CH3SH	DMS	DMDS	TRS
11/10/99	1	1300 - 1600	MAX	16.09	4.30	0.00	0.61	21.60
			MIN	7.45	2.00	0.00	0.00	9.45
			AVG	9.10	3.85	0.00	0.10	13.14
11/10/99	2	1600 - 1900	MAX	12.55	6.54	0.00	0.11	19.31
			MIN	7.52	4.11	0.00	0.00	11.64
			AVG	9.32	5.01	0.00	0.07	14.48
11/10/99	3	1900 - 2200	MAX	11.44	6.46	0.00	0.12	18.13
			MIN	0.00	4.96	0.00	0.00	4.96
			AVG	9.52	5.69	0.00	0.00	15.21
			MEAN	9.32	4.85	0.00	0.06	14.28

PPM - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercaptan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds
* Mean determined as arithmetic average of the average results for each of the runs

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Volumetric Flow and Emission Output - Table V

FACILITY: Smurfitt-Stone Container Corp.
LOCATION: Panama City, Florida

SOURCE: No. 2 Recovery Boiler System

Date	Run Number	Source Recoverys	Particulate Emissions LB/HR	LB/Ton BLS	Vol. Flow Rate ACFM	SCFMD	Black Liquor Firing Rate (Tons/Hr)	Percent Isokinetic
11/3/99	1	1A	9.85	0.50	181251.0	90522.0	39.24 /2	108.2
11/3/99	2	1A	22.70	1.15	182535.0	89755.0	39.41 /2	108.8
11/3/99	3	1A	19.46	0.99	177859.0	89010.0	39.33 /2	108.4
		Mean	17.33	0.88	180548.3	89762.3	39.33 /2	108.5
11/3/99	1	1B	10.94	0.56	170877.0	81801.0	39.32 /2	107.9
11/3/99	2	1B	10.55	0.53	173183.0	80970.0	39.44 /2	109.2
11/3/99	3	1B	9.06	0.46	172636.0	81926.0	39.61 /2	108.9
		Mean	10.18	0.52	172232.0	81565.7	39.46 /2	108.6
		Total	27.52	0.70	352780.3	171328.0	39.39	

Mean determined as arithmetic average of the results for each of the three runs.

REMARKS: Allowable Emissions (Stacks A and B) = 3.0 lbs/Ton Black Liquor Solids
One Ton BLS = 3000 lbs

II. Summary And Discussion Of Results

NO. 1 SMELT DISSOLVING TANK 1999

Results of these tests are summarized in Tables I through III. Complete emissions data along with the supporting field and analytical data are included in Appendices A through E and J.

This unit is within compliance limitations for the required parameters. The allowable emissions and the measured emissions are listed below:

Parameter	Allowable Emissions	Measured Emissions
Particulate Matter	27.08 Lbs/Hr	21.54 ~~26.03~~ Lbs/Hr
Total Reduced Sulfur (TRS)	0.048 Lb/Ton DPF	0.0202 Lb/Ton DPF
Visible Emissions	20%	2.50 %

T S. I

Volumetric Flow and Emission Output - Table I

FACILITY: Smurfit-Stone
LOCATION: Panama City Fl.

SOURCE: No. 1 Smelt Dissolving tank

Date	Run Number	Particulate Emission GR/SCF	LB/HR	Vol. Flow Rate ACFM	SCFMD	Black Liquor Firing Rat (Tons/Hr)(3000 lbs/Ton)	Process Feed Rate (DPF)
11/2/99	1	0.1576	23.99	27852.0	17758.0	37.92	26.17
11/2/99	2	0.1150	17.50	28025.0	17754.0	38.08	26.20
11/2/99	3	0.1512	23.14	28183.0	17854.0	37.62	25.73
	Mean	0.1413	21.54	28020.0	17788.7	37.87	26.03

Mean determined as arithmetic average of the results for each of the three runs.

REMARKS: Allowable Emissions = 3.59 (DPF)^0.62

DPF = Dry Process feed rate in Tons/Hr

Run 1 = 26.17 lbs/hr
Run 2 = 26.20 lbs/hr
Run 3 = 25.73lbs/hr
Average = 26.03 lbs/hr

TECHNICAL SERVICES INC.

TABLE II

TOTAL REDUCED SULFUR GAS EMISSIONS
No. 1 Smelt Dissolving Tank Vent

Smurfit-Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS H2S	CH3SH	DMDS	DMS	TRS
11/02/99	1	1000 - 1300	MAX	10.11	2.70	0.00	0.00	12.81
			MIN	1.69	1.46	0.00	0.00	3.15
			AVG	4.61	1.96	0.00	0.00	6.57
11/02/99	2	1300 - 1560	MAX	2.66	1.92	0.00	0.00	4.59
			MIN	1.33	1.39	0.00	0.00	2.71
			AVG	1.85	1.57	0.00	0.00	3.43
11/02/99	3	1600 - 1900	MAX	10.28	4.35	0.00	0.00	14.63
			MIN	1.46	1.70	0.00	0.00	3.16
			AVG	4.36	2.76	0.00	0.00	7.12
			MEAN	3.61	2.10	0.00	0.00	5.71

ppm - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercatan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds
* Mean determined as arithmetic average of the average results for each of three runs

TECHNICAL SERVICES INC.

TABLE III

TOTAL REDUCED SULFUR GAS EMISSIONS SUMMARY
No. 1 Smelt Dissolving Tank Vent

Smurfit-Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	TRS PPM	VOL FLOW SCFMD	DPF SOLIDS TONS/HR	TRS MASS EMISSIONS LBS/HR	LBS/TON DPF
11/02/99	1	1000 - 1300	MAX	12.81			1.2175	0.0474
			MIN	3.15			0.2999	0.0117
			AVG	6.57	17902	25.675	0.6247	0.0243
11/02/99	2	1300 - 1560	MAX	4.59			0.4022	0.0158
			MIN	2.71			0.2381	0.0094
			AVG	3.43	16518	25.450	0.3006	0.0118
11/02/99	3	1600 - 1900	MAX	14.63			1.2830	0.0504
			MIN	3.16			0.2768	0.0109
			AVG	7.12	16149	25.379	0.6247	0.0245
			MEAN	5.71	16856	25.501	0.5166	0.0202

ppm - Parts per million by volume
* Mean determined as arithmetic average of the average results for each of the runs

LBS/HR = 1E-06*PPM*5.31*SCFMD

II. Summary And Discussion Of Results

NO. 2 SMELT DISSOLVING TANK 1999

Results of these tests are summarized in Tables I through III. Complete emissions data along with the supporting field and analytical data are included in Appendices A through J.

This unit is within compliance limitations for the required parameters. The allowable emissions and the measured emissions are listed below:

Parameter	Allowable Emissions	Measured Emissions
Particulate Matter	27.08 Lbs/Hr	16.81 Lbs/Hr
Total Reduced Sulfur (TRS)	0.048 Lb/Ton DPF	0.0151 Lb/Ton DPF
Visible Emissions	20%	4.17 %

T S I

Volumetric Flow and Emission Output - Table I

FACILITY: Smurfit-Stone
LOCATION: Panama City Fl.

SOURCE: No. 2 Smelt Dissolving tank

Date	Run Number	Particulate Emissions GR/SCF	LB/HR	Vol. Flow Rate ACFM	SCFMD	Black Liquor Firing Rat (Tons/Hr)(3000 lbs/Ton)	Process Feed Rate (DPF)
11/3/99	1	0.1434	16.39	22902.0	13338.0	37.92	26.17
11/3/99	2	0.1470	16.93	23257.0	13436.0	38.08	26.20
11/3/99	3	0.1508	17.10	22593.0	13228.0	37.62	25.73
	Mean	0.1471	16.81	22917.3	13334.0	37.87	26.03

Mean determined as arithmetic average of the results for each of the three runs.

REMARKS: Allowable Emissions = 3.59 (DPF)^0.62

DPF = Dry Process feed rate in Tons/Hr

Run 1 = 27.17 lbs/hr
Run 2 = 27.19 lbs/hr
Run 3 = 26.89 lbs/hr
Average = 27.08 lbs/hr

TECHNICAL SERVICES INC.

TABLE II

TOTAL REDUCED SULFUR GAS EMISSIONS
No. 2 Smelt Dissolving Tank Vent

Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS H2S	CH3SH	DMDS	DMS	TRS
11/03/99	1	1000 - 1300	MAX	0.86	13.72	0.30	0.00	15.17
			MIN	0.00	3.90	0.14	0.00	4.19
			AVG	0.26	6.79	0.19	0.00	7.44
11/03/99	2	1300 - 1600	MAX	0.22	6.77	0.21	0.00	7.42
			MIN	0.00	2.24	0.11	0.00	2.46
			AVG	0.13	3.89	0.15	0.00	4.33
11/03/99	3	1600 - 1900	MAX	1.10	4.17	0.16	0.00	5.60
			MIN	0.00	3.42	0.00	0.00	3.42
			AVG	0.82	3.93	0.01	0.00	4.77
			MEAN	0.41	4.87	0.12	0.00	5.51

ppm - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercatan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds

* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE III

TOTAL REDUCED SULFUR GAS EMISSIONS SUMMARY
No. 2 Smelt Dissolving Tank Vent

Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	TRS PPM	VOL FLOW SCFMD	DPF SOLIDS TONS/HR	TRS MASS EMISSIONS LBS/HR	LBS/TON DPF
11/03/99	1	1000 - 1300	MAX	15.17			1.0749	0.0419
			MIN	4.19			0.2969	0.0116
			AVG	7.44	13340	25.675	0.5272	0.0205
11/03/99	2	1300 - 1600	MAX	7.42			0.5165	0.0201
			MIN	2.46			0.1715	0.0067
			AVG	4.33	13117	25.725	0.3015	0.0117
11/03/99	3	1600 - 1900	MAX	5.60			0.3923	0.0153
			MIN	3.42			0.2395	0.0094
			AVG	4.77	13194	25.570	0.3342	0.0131
			MEAN	5.51	13217	25.657	0.3876	0.0151

ppm - Parts per million by volume
* Mean determined as arithmetic average of the average results for each of the runs

LBS/HR = 1E-06*PPM*5.31*SCFM

II. Summary and discussion of results

1998

Results of the testing are summarized in Tables I through IV. Complete emissions data along with supportive field and analytical data are included in Appendices A through I, and L.

The No. 3 Bark Boiler was within compliance during the tests. The average particulate emissions were 13.27 lbs/hr. The calculated allowable emissions for this source are 69.73 lbs/hr.

The SO2 (with NCG) emissions averaged 1.87 lbs/hr, with an allowable of 781 lbs/hr.

The SO2 (without NCG) emissions averaged 500.69 lbs/hr, with an allowable of 772 lbs/hr.

The TRS emissions averaged 0.42 ppm, with an allowable of 5.0 ppm.

The visible emissions average opacity was 8.54 %, with an allowable of 30%.

T S I

Volumetric Flow and Emission Output - Table I

FACILITY: Smurfit-Stone
LOCATION: Panama City, Florida

SOURCE: No. 4 Bark Boiler

Date	Run Number	Particulate Emissions GR/SCF	Particulate Emissions LB/HR	Vol. Flow Rate ACFM	Vol. Flow Rate SCFMD	Percent O2	Stack Temp 'F	Percent H20
12/06/98	1	0.0103	14.47	254261.0	163924.0	7.2	144.6	26.4
12/06/98	2	0.0088	12.34	251249.0	163561.0	6.9	144.5	25.7
12/06/98	3	0.0094	13.00	247900.0	161362.0	7.3	142.8	25.9
	Mean	0.0095	13.27	251136.7	162949.0	7.1	144.0	26.0

Mean determined as arithmetic average of the results for each of the three runs.

REMARKS: Allowable Emissions = 69.73 lbs/hr

TECHNICAL SERVICES INC.

TABLE II

SULFUR DIOXIDE EMISSIONS SUMMARY
No. 4 Bark Boiler with NCG

STONE CONTAINER CORPORATION
PANAMA CITY, FLORIDA

DATE	RUN No.	TIME PERIOD	LEVEL	SO2 PPM	VOLUMETRIC FLOW SCFMD	OXYGEN %	SO2 EMISSIONS LBS/DSCF	SO2 EMISSIONS LB/HR
15/05/98	1	1430 - 1530	MAX	1.77			2.937E-07	2.8801
			MIN	0.77			1.272E-07	1.2468
			AVG	1.39	163419	6.00	2.308E-07	2.2635
15/05/98	2	1540 - 1640	MAX	5.20			8.637E-07	8.3410
			MIN	1.00			1.661E-07	1.6040
			AVG	1.30	160948	5.90	2.155E-07	2.0813
15/05/98	3	1650 - 1750	MAX	8.23			1.366E-06	13.2539
			MIN	0.30			4.998E-08	0.4849
			AVG	0.79	161704	5.90	1.307E-07	1.2685
			MEAN	1.16	162024	5.93	1.924E-07	1.8711

ppm - Parts per million by volume

* Mean determined as arithmetic average of the average results for each of the runs

LBS/HR = 1.660E-07 x PPM x SCFMD x 60

TECHNICAL SERVICES INC.

TABLE III

SULFUR DIOXIDE EMISSIONS SUMMARY
No. 4 Bark Boiler without NCG

STONE CONTAINER CORPORATION
PANAMA CITY, FLORIDA

DATE	RUN No.	TIME PERIOD	LEVEL	SO2 PPM	VOLUMETRIC FLOW SCFMD	OXYGEN %	SO2 EMISSIONS LBS/DSCF	SO2 EMISSIONS LB/HR
12/06/98	1	0930 - 1030	MAX	345.87			5.742E-05	563.4207
			MIN	215.80			3.582E-05	351.5349
			AVG	280.82	163552	7.17	4.662E-05	457.4445
12/06/98	2	1040 - 1140	MAX	324.57			5.388E-05	528.1803
			MIN	246.76			4.096E-05	401.5548
			AVG	297.35	163384	6.89	4.936E-05	483.8819
12/06/98	3	1155 - 1255	MAX	369.40			6.132E-05	594.6556
			MIN	317.40			5.269E-05	510.9380
			AVG	348.33	161625	7.24	5.782E-05	560.7332
			MEAN	308.83	162854	7.10	5.127E-05	500.6866

ppm - Parts per million by volume

* Mean determined as arithmetic average of the average results for each of the runs

LBS/HR = 1.660E-07 x PPM x SCFMD x 60

TECHNICAL SERVICES INC.

TABLE IV

TOTAL REDUCED SULFUR GAS EMISSIONS
Bark Boiler No. 4 w/NCG

Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS, PPM H2S	CH3SH	DMS	DMDS	TRS
12/05/98	1	1100 - 1400	MAX	0.72	0.00	0.00	0.00	0.72
			MIN	0.00	0.00	0.00	0.00	0.00
			AVG	0.12	0.00	0.00	0.00	0.12
12/05/98	2	1400 - 1700	MAX	11.49	0.00	0.00	0.00	11.49
			MIN	0.00	0.00	0.00	0.00	0.00
			AVG	1.03	0.00	0.00	0.00	1.03
12/05/98	3	1700 - 2000	MAX	1.77	0.00	0.00	0.00	1.77
			MIN	0.00	0.00	0.00	0.00	0.00
			AVG	0.10	0.00	0.00	0.00	0.10
			MEAN	0.42	0.00	0.00	0.00	0.42

PPM - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercaptan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds
* Mean determined as arithmetic average of the average results for each of the runs

II. Summary and discussion of results

1998

Results of the testing are summarized in Table I. Complete emissions data along with supportive field and analytical data are included in Appendices A, B, and C.

The No. 3 Bark Boiler was within compliance during the test. The average particulate emissions were 53.58 lbs/hr. The calculated allowable emissions for this source are 93.14 lbs/hr.

The visible emissions average opacity was 4.2%, with an allowable of 30%.

T S I

Volumetric Flow and Emission Output - Table I

FACILITY: Stone Container
LOCATION: Panama City, Fl.

SOURCE: No. 3 Bark Boiler

Date	Run Number	Particulate Emissions GR/SCF	LB/HR	LB/MMBTU	Vol. Flow Rate ACFM	SCFMD	Percent O2	Stack Temp 'F	Percent Isokinetic
12/4/98	1	0.0461	60.97	0.106	231654.0	154307.0	8.4	141.6	101.3
12/4/98	2	0.0416	56.38	0.093	231389.0	158115.0	8.1	141.3	97.8
12/4/98	3	0.0324	43.39	0.079	232025.0	156231.0	9.1	140.8	99.5
	Mean	0.0400	53.58	0.093	231689.3	156217.7	8.5	141.2	99.5

Mean determined as arithmetic average of the results for each of the three runs.

REMARKS: Allowable Emissions = 93.14 lbs/hr

LB/MMBTU = (Gr/SCF/7000) x (Fuel Fact.) x [20.9 / (20.9 - %O2)]

II. Summary and discussion of results

1998

Results of the testing are summarized in Table I. Complete emissions data along with supportive field and analytical data are included in Appendices A, B, and C.

The Slaker Vent Stack was well within compliance during the test. The average particulate emissions were 0.53 lb/hr. The calculated allowable emissions for this source are 48.606 lbs/hr.

Due to the high concentration of entrained moisture in the impingers, theoretical moisture had to be used in the flow calculations.

T S I

Volumetric Flow and Emission Output - Table I

FACILITY: Stone Container
LOCATION: Panama City, Fl.

SOURCE: Slaker Vent

Date	Run Number	Particulate Emissions GR/SCF	LB/HR	Vol. Flow Rate ACFM	SCFMD	Stack Temp 'F	Percent Moisture (Theoretical)	Percent Isokinetic
12/7/98	1	0.0315	1.08	8442.0	3998.0	172.7	43.5	91.7
12/8/98	2	0.0093	0.30	8295.0	3778.0	175.0	45.5	96.0
12/8/98	3	0.0062	0.20	7989.0	3711.0	174.1	44.5	99.3
	Mean	0.0157	0.53	8242.0	3829.0	173.9	44.5	95.7

Mean determined as arithmetic average of the results for each of the three runs.

REMARKS:

Allowable Emissions (Ea) = [55 x (Tons/hr)^0.11] - 40
Allowable Emissions (Ea) = [55 x (76.34)^0.11] - 40 = 48.606 lbs/hr

Note: Calculations for the tons/hr can be found in the process data in Appendix D

TECHNICAL SERVICES, INC.

SOURCE EMISSIONS TEST SUMMARY

STONE CONTAINER CORPORATION
PANAMA CITY, FLORIDA

EMISSIONS TESTS:

PARTICULATE MATTER
TOTAL REDUCED SULFUR GASES
VISIBLE EMISSIONS

Emissions Tests Performed By: Technical Services, Inc.

SOURCE NAME: LIME KILN 1998

SOURCE ID NO.: 10PCY03000904

PARAMETER	ALLOWABLE EMISSIONS	MEASURED EMISSIONS	REMARKS
PARTICULATE MATTER	30.68 Lbs/Hr.	28.49 Lbs/Hr.	PASS
TOTAL REDUCED SULFUR GASES	20 PPM @ 10% O2	2.20 PPM @ 10% O2	PASS
VISIBLE EMISSIONS	20 % Opacity	0.0 Opacity	PASS

T S I

Volumetric Flow and Emission Output - Table I

FACILITY: Stone Container
LOCATION: Panama City, Fl.

SOURCE: Lime Kiln

Date	Run Number	Particulate Emissions GR/SCF	LB/HR	Vol. Flow Rate ACFM	SCFMD	Percent O2	Stack Temp 'F	Percent H20	Percent Isokinetic
12/7/98	1	0.0691	28.60	84967.0	48283.0	6.1	163.0	33.2	99.0
12/7/98	2	0.0570	24.39	87493.0	49921.0	7.2	163.3	32.9	101.4
12/7/98	3	0.0782	32.48	85413.0	48457.0	6.2	163.1	33.3	100.0
	Mean	0.0681	28.49	85957.7	48887.0	6.5	163.1	33.1	100.1

Mean determined as arithmetic average of the results for each of the three runs.

REMARKS: Allowable Emissions = 17.31(P)^0.16 = lbs/hr

TECHNICAL SERVICES INC.

TABLE II

TOTAL REDUCED SULFUR GAS EMISSIONS
LIME KILN

Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS, PPM H2S	CH3SH	DMS	DMDS	TRS
12/07/98	1	1100 - 1400	MAX	2.98	0.00	0.00	0.00	2.98
			MIN	1.38	0.00	0.00	0.00	1.38
			AVG	2.02	0.00	0.00	0.00	2.02
12/07/98	2	1400 - 1700	MAX	3.32	0.00	0.00	0.00	3.32
			MIN	0.27	0.00	0.00	0.00	0.27
			AVG	2.50	0.00	0.00	0.00	2.50
12/07/98	3	1700 - 2000	MAX	7.42	0.00	0.00	0.00	7.42
			MIN	2.04	0.00	0.00	0.00	2.04
			AVG	4.22	0.00	0.00	0.00	4.22
			MEAN	2.91	0.00	0.00	0.00	2.91

PPM - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercaptan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds
*** Mean determined as arithmetic average of the average results for each of the runs**

TECHNICAL SERVICES INC.

TABLE III

TOTAL REDUCED SULFUR GAS EMISSIONS SUMMARY
LIME KILN

Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	OXYGEN %	CONCENTRATIONS, PPM TRS	TRS / COR. FOR O2
12/07/98	1	1100 - 1400	MAX	6.25	2.98	2.22
			MIN	6.08	1.38	1.02
			AVG	6.17	2.02	1.50
12/07/98	2	1400 - 1700	MAX	10.22	3.32	3.39
			MIN	6.28	0.27	0.20
			AVG	7.71	2.50	2.07
12/07/98	3	1700 - 2000	MAX	5.71	7.42	5.34
			MIN	5.65	2.04	1.46
			AVG	5.68	4.22	3.03
			MEAN	6.52	2.91	2.20

PPM - Parts per million by volume
* Mean determined as arithmetic average of the average results for each of the runs

II. Summary and discussion of results

1998

Results of the testing are summarized in Tables I through III. Complete emissions data along with supportive field and analytical data are included in Appendices A through E, G and J.

The No. 2 Smelt Tank was within compliance during the tests. The average particulate emissions were 24.36 lbs/hr. The calculated allowable emissions for this source are 26.83 lbs/hr.

The TRS emissions averaged 0.0338 lb/Ton BLS, with an allowable of 0.048 lb/Ton BLS.

The visible emissions average opacity was 1% , with an allowable of 20%.

T S I

Volumetric Flow and Emission Output - Table I

FACILITY: Stone Container Corp.
LOCATION: Panama City Fl.

SOURCE: No. 2 Smelt Dissolving tank

Date	Run Number	Particulate Emissions GR/SCF	LB/HR	Vol. Flow Rate ACFM	SCFMD	Black Liquor Firing Rat (Tons/Hr)(3000 lbs/Ton)	Process Feed Rate (DPF)
11/30/98	1	0.2263	24.13	21091.0	12442.0	37.79	25.58
11/30/98	2	0.2153	24.08	22411.0	13046.0	37.88	25.57
11/30/98	3	0.2222	24.88	22650.0	13061.0	38.29	25.77
	Mean	0.2213	24.36	22050.7	12849.7	37.99	25.64

Mean determined as arithmetic average of the results for each of the three runs.

REMARKS: Allowable Emissions = 3.59 (DPF)^0.62

DPF = Dry Process feed rate in Tons/Hr

Run 1 = 26.79 lbs/hr
Run 2 = 26.78 lbs/hr
Run 3 = 26.91 lbs/hr
Average = 26.83 lbs/hr

TECHNICAL SERVICES INC.

TABLE II

TOTAL REDUCED SULFUR GAS EMISSIONS
No. 2 Smelt Dissolving Tank Vent

Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS H2S	CH3SH	DMDS	DMS	TRS
12/01/98	1	1000 - 1300	MAX	3.04	16.96	0.22	0.00	20.44
			MIN	1.68	8.16	0.16	0.00	10.16
			AVG	2.17	11.98	0.19	0.00	14.54
12/01/98	2	1300 - 1600	MAX	5.77	11.47	0.19	0.00	17.63
			MIN	1.99	7.17	0.00	0.00	9.15
			AVG	3.72	8.76	0.07	0.00	12.62
12/01/98	3	1600 - 1900	MAX	2.83	11.78	0.00	0.00	14.61
			MIN	1.80	9.65	0.00	0.00	11.44
			AVG	2.18	10.93	0.00	0.00	13.11
			MEAN	2.69	10.56	0.09	0.00	13.42

ppm - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercatan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds
* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE III

TOTAL REDUCED SULFUR GAS EMISSIONS SUMMARY
No. 2 Smelt Dissolving Tank Vent

Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	TRS PPM	VOL FLOW SCFMD	DPF SOLIDS TONS/HR	TRS MASS EMISSIONS LBS/HR	TRS MASS EMISSIONS LBS/TON DPF
12/01/98	1	1000 - 1300	MAX	20.44			1.3109	0.0511
			MIN	10.16			0.6517	0.0254
			AVG	14.54	12077	25.675	0.9324	0.0363
12/01/98	2	1300 - 1600	MAX	17.63			1.1548	0.0455
			MIN	9.15			0.5998	0.0237
			AVG	12.62	12338	25.360	0.8265	0.0326
12/01/98	3	1600 - 1900	MAX	14.61			0.9271	0.0363
			MIN	11.44			0.7262	0.0285
			AVG	13.11	11952	25.515	0.8320	0.0326
			MEAN	13.42	12122	25.517	0.8637	0.0338

ppm - Parts per million by volume
* Mean determined as arithmetic average of the average results for each of the runs

LBS/HR = 1E-06*PPM*5.31*SCFM

II. Summary and discussion of results

1998

Results of the testing are summarized in Tables I through III. Complete emissions data along with supportive field and analytical data are included in Appendices A through E, G and J.

The No. 1 Smelt Tank was within compliance during the tests. The average particulate emissions were 22.17 lbs/hr. The calculated allowable emissions for this source are 27.08 lbs/hr.

The TRS emissions averaged 0.0399 lb/Ton BLS, with an allowable of 0.048 lb/Ton BLS.

The visible emissions average opacity was 0 %, with an allowable of 20%.

T S I

Volumetric Flow and Emission Output - Table I

FACILITY: Stone Container Corp.
LOCATION: Panama City Fl.

SOURCE: No. 1 Smelt Dissolving tank

Date	Run Number	Particulate Emissions GR/SCF	LB/HR	Vol. Flow Rate ACFM	SCFMD	Liquor Firing Rate (Tons/Hr)(3000 lbs/Ton)	Process Feed Rate (DPF)
12/5/98	1	0.1722	23.18	26762.0	15703.0	37.92	26.17
12/5/98	2	0.1325	18.58	27415.0	16359.0	38.08	26.20
12/5/98	3	0.1701	24.75	27611.0	16972.0	37.62	25.73
	Mean	0.1583	22.17	27262.7	16344.7	37.87	26.03

Mean determined as arithmetic average of the results for each of the three runs.

REMARKS: Allowable Emissions = 3.59 (DPF)^0.62

DPF = Dry Process feed rate in Tons/Hr

Run 1 = 27.17 lbs/hr
Run 2 = 27.19 lbs/hr
Run 3 = 26.89 lbs/hr
Average = 27.08 lbs/hr

TECHNICAL SERVICES INC.

TABLE II

TOTAL REDUCED SULFUR GAS EMISSIONS
No. 1 Smelt Dissolving Tank Vent

Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS H2S	CH3SH	DMDS	DMS	TRS
11/30/98	1	1230 - 1530	MAX	13.32	5.06	0.20	0.00	18.77
			MIN	5.72	2.83	0.00	0.00	8.55
			AVG	8.30	3.73	0.03	0.00	12.10
11/30/98	2	1530 - 1830	MAX	19.00	3.74	0.00	0.00	22.74
			MIN	6.16	3.06	0.00	0.00	9.22
			AVG	7.47	3.35	0.00	0.00	10.82
11/30/98	3	1830 - 2130	MAX	10.81	3.81	0.00	0.00	14.62
			MIN	6.26	3.19	0.00	0.00	9.46
			AVG	8.44	3.50	0.00	0.00	11.94
			MEAN	8.07	3.53	0.01	0.00	11.62

ppm - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercatan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds
* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE III

TOTAL REDUCED SULFUR GAS EMISSIONS SUMMARY
No. 1 Smelt Dissolving Tank Vent

Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	TRS PPM	VOL FLOW SCFMD	DPF SOLIDS TONS/HR	TRS MASS EMISSIONS LBS/HR	LBS/TON DPF
11/30/98	1	1230 - 1530	MAX	18.77			1.6775	0.0653
			MIN	8.55			0.7642	0.0298
			AVG	12.10	16828	25.675	1.0809	0.0421
11/30/98	2	1530 - 1830	MAX	22.74			2.0025	0.0785
			MIN	9.22			0.8120	0.0318
			AVG	10.82	16586	25.512	0.9526	0.0373
11/30/98	3	1830 - 2130	MAX	14.62			1.2592	0.0491
			MIN	9.46			0.8142	0.0318
			AVG	11.94	16216	25.624	1.0280	0.0401
			MEAN	11.62	16543.3	25.604	1.0205	0.0399

ppm - Parts per million by volume
* Mean determined as arithmetic average of the average results for each of the runs

LBS/HR = 1E-06*PPM*5.31*SCFMD

II. Summary and discussion of results

No. 2 Recovery 1998

Results of the testing are summarized in Tables I through V. Complete emissions data along with supportive field and analytical data are included in Appendices A through E, and H.

The No.'s 2A and 2B Recovery Boilers were within compliance during the tests. The average particulate emissions combined were 0.52 lb/Ton BLS. The allowable emissions for this source are 3.0 lbs/Ton BLS.

The TRS emissions for the No.'s 2A and 2B Recoverys averaged 14.96 ppm corrected to 8% O2, with an allowable of 17.5 ppm corrected to 8% O2.

The visible emissions opacity was 2.5% for both Recoverys, with an allowable of 45%.

TECHNICAL SERVICES INC.

TABLE I

TOTAL REDUCED SULFUR GAS EMISSIONS
Recovery Boiler 2A

Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS. PPM H2S	CH3SH	DMS	DMDS	TRS
12/3-4/98	1	1300 - 1600	MAX	6.31	6.61	0.00	0.00	12.92
			MIN	4.45	3.15	0.00	0.00	7.60
			AVG	5.55	5.66	0.00	0.00	11.22
12/3-4/98	2	1600 - 1900	MAX	6.16	6.14	0.00	0.00	12.31
			MIN	4.54	5.26	0.00	0.00	9.80
			AVG	5.12	5.65	0.00	0.00	10.78
12/3-4/98	3	1900 - 2200	MAX	6.82	6.86	0.00	0.00	13.68
			MIN	3.60	5.19	0.00	0.00	8.79
			AVG	5.39	5.86	0.00	0.00	11.24
			MEAN	5.35	5.72	0.00	0.00	11.08

PPM - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercaptan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds
* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE II

TOTAL REDUCED SULFUR GAS EMISSIONS SUMMARY
Recovery Boiler 2A

Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	OXYGEN %	CONCENTRATIONS, PPM TRS	TRS / COR. FOR O2
12/3-4/98	1	1300 - 1600	MAX	6.74	12.92	11.78
			MIN	6.52	7.60	6.83
			AVG	6.63	11.22	10.15
12/3-4/98	2	1600 - 1900	MAX	7.06	12.31	11.48
			MIN	6.21	9.80	8.62
			AVG	6.61	10.78	9.74
12/3-4/98	3	1900 - 2200	MAX	6.69	13.68	12.43
			MIN	6.12	8.79	7.68
			AVG	6.42	11.24	10.02
			MEAN	6.55	11.08	9.97

PPM - Parts per million by volume
* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE III

TOTAL REDUCED SULFUR GAS EMISSIONS
Recovery Boiler 2B

Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS. PPM H2S	CH3SH	DMS	DMDS	TRS
12/05/98	1	1300 - 1600	MAX	6.20	24.52	0.00	0.00	30.72
			MIN	3.90	5.85	0.00	0.00	9.75
			AVG	5.04	18.86	0.00	0.00	23.90
12/05/98	2	1600 - 1900	MAX	5.37	19.44	0.00	0.00	24.82
			MIN	3.91	15.64	0.00	0.00	19.55
			AVG	4.65	17.67	0.00	0.00	22.32
12/05/98	3	1900 - 2200	MAX	6.68	23.87	0.00	0.00	30.55
			MIN	3.33	15.30	0.00	0.00	18.63
			AVG	4.19	17.54	0.00	0.00	21.74
			MEAN	4.63	18.03	0.00	0.00	22.65

PPM - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercaptan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds
* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE IV

TOTAL REDUCED SULFUR GAS EMISSIONS SUMMARY
Recovery Boiler 2B

Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	OXYGEN %	CONCENTRATIONS, PPM TRS	TRS / COR. FOR O2
12/05/98	1	1300 - 1600	MAX	6.25	30.72	27.07
			MIN	6.12	9.75	8.52
			AVG	6.19	23.90	20.97
12/05/98	2	1600 - 1900	MAX	6.51	24.82	22.26
			MIN	5.73	19.55	16.64
			AVG	6.12	22.32	19.50
12/05/98	3	1900 - 2200	MAX	6.70	30.55	27.77
			MIN	6.21	18.63	16.37
			AVG	6.44	21.74	19.40
			MEAN	6.25	22.65	19.96

PPM - Parts per million by volume
* Mean determined as arithmetic average of the average results for each of the runs

T S I

Volumetric Flow and Emission Output - Table V

FACILITY: Smurfitt-Stone
LOCATION: Panama City, Florida

SOURCE: No. 2 Recovery Boiler System

Date	Run Number	Source Recoverys	Particulate Emissions LB/HR	LB/Ton BL	Vol. Flow Rate ACFM	SCFMD	Black Liquor Firing Rate (Tons/Hr)	Percent Isokinetic
12/01/98	1	2A	5.18	0.26	174172.0	81728.0	39.19 /2	103.5
12/01/98	2	2A	7.07	0.38	167579.0	81612.0	37.68 /2	101.2
12/01/98	3	2A	5.17	0.27	178528.0	87485.0	37.93 /2	97.9
		Mean	5.81	0.30	173426.3	83608.3	38.27 /2	100.9
12/01/98	1	2B	15.11	0.80	162854.0	76965.0	37.79 /2	99.6
12/01/98	2	2B	14.20	0.75	143319.0	70797.0	37.94 /2	95.7
12/01/98	3	2B	12.10	0.64	154223.0	76747.0	37.99 /2	98.6
		Mean	13.80	0.73	153465.3	74836.3	37.91 /2	98.0
		Total	19.61	0.52	326891.7	158444.7	38.09	

Mean determined as arithmetic average of the results for each of the three runs.

REMARKS: Allowable Emissions (Stacks A and B) = 3.0 lbs/Ton Black Liquor Solids
One Ton BLS = 3000 lbs

II. Summary and discussion of results

No. 1 Recovery 1998

Results of the testing are summarized in Tables I through V. Complete emissions data along with supportive field and analytical data are included in Appendices A through E, and H.

The No.'s 1A and 1B Recovery Boilers were within compliance during the tests. The average particulate emissions combined were 0.72 lb/Ton BLS. The allowable emissions for this source are 3.0 lbs/Ton BLS.

The TRS emissions for the No.'s 1A and 1B Recoverys averaged 9.47 ppm corrected to 8% O2, with an allowable of 17.5 ppm corrected to 8% O2.

The visible emissions opacity was 0% for both Recoverys, with an allowable of 45%.

TECHNICAL SERVICES INC.

TABLE I

TOTAL REDUCED SULFUR GAS EMISSIONS
Recovery Boiler 1A

Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS. PPM H2S	CH3SH	DMS	DMDS	TRS
12/02/98	1	1030 - 1330	MAX	7.36	4.81	0.00	0.00	12.17
			MIN	5.19	2.67	0.00	0.00	7.87
			AVG	5.97	4.12	0.00	0.00	10.09
12/02/98	2	1330 - 1630	MAX	8.52	5.37	0.00	0.00	13.88
			MIN	5.41	3.20	0.00	0.00	8.61
			AVG	6.71	3.92	0.00	0.00	10.63
12/02/98	3	1630 - 1930	MAX	10.92	5.84	0.00	0.00	16.76
			MIN	6.36	3.53	0.00	0.00	9.89
			AVG	8.41	4.32	0.00	0.00	12.73
			MEAN	7.03	4.12	0.00	0.00	11.15

PPM - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercaptan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds
* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE II

TOTAL REDUCED SULFUR GAS EMISSIONS SUMMARY
Recovery Boiler 1A

Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	OXYGEN %	CONCENTRATIONS, PPM TRS	TRS / COR. FOR O2
12/02/98	1	1030 - 1330	MAX	6.82	12.17	11.16
			MIN	6.56	7.87	7.08
			AVG	6.69	10.09	9.17
12/02/98	2	1330 - 1630	MAX	7.27	13.88	13.15
			MIN	6.95	8.61	7.97
			AVG	7.15	10.63	9.98
12/02/98	3	1630 - 1930	MAX	7.22	16.76	15.82
			MIN	6.98	9.89	9.17
			AVG	7.12	12.73	11.93
			MEAN	6.99	11.15	10.36

PPM - Parts per million by volume
* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE III

TOTAL REDUCED SULFUR GAS EMISSIONS
Recovery Boiler 1B

Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	CONCENTRATIONS. PPM H2S	CH3SH	DMS	DMDS	TRS
12/03/98	1	1300 - 1600	MAX	5.27	6.37	0.00	0.00	11.64
			MIN	0.15	3.13	0.00	0.00	3.29
			AVG	3.98	5.56	0.00	0.00	9.55
12/03/98	2	1600 - 1900	MAX	6.54	8.30	0.00	0.00	14.84
			MIN	2.18	4.05	0.00	0.00	6.23
			AVG	3.96	6.30	0.00	0.00	10.27
12/03/98	3	1900 - 2200	MAX	2.94	4.84	0.00	0.00	7.78
			MIN	1.35	2.79	0.00	0.00	4.14
			AVG	1.90	3.65	0.00	0.00	5.56
			MEAN	3.28	5.17	0.00	0.00	8.46

PPM - Parts per million by volume
H2S - Hydrogen Sulfide
CH3SH - Methyl Mercaptan
DMS - Dimethyl Sulfide
DMDS - Dimethyl Disulfide
TRS - Total Reduced Sulfur Compounds
* Mean determined as arithmetic average of the average results for each of the runs

TECHNICAL SERVICES INC.

TABLE IV

TOTAL REDUCED SULFUR GAS EMISSIONS SUMMARY
Recovery Boiler 1B

Stone Container Corporation
Stone, Panama City
Panama City, Florida

DATE	RUN No.	TIME PERIOD	LEVEL	OXYGEN %	CONCENTRATIONS, PPM TRS	TRS / COR. FOR O2
12/03/98	1	1300 - 1600	MAX	8.25	11.64	11.86
			MIN	8.15	3.29	3.33
			AVG	8.20	9.55	9.69
12/03/98	2	1600 - 1900	MAX	8.53	14.84	15.46
			MIN	7.05	6.23	5.80
			AVG	7.79	10.27	10.10
12/03/98	3	1900 - 2200	MAX	8.85	7.78	8.32
			MIN	8.74	4.14	4.39
			AVG	8.79	5.56	5.92
			MEAN	8.26	8.46	8.57

PPM - Parts per million by volume
* Mean determined as arithmetic average of the average results for each of the runs

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Volumetric Flow and Emission Output - Table V

FACILITY: Smurfitt-Stone
LOCATION: Panama City, Florida

SOURCE: No. 1 Recovery Boiler System

Date	Run Number	Source Recoverys	Particulate Emissions LB/HR	Particulate Emissions LB/Ton BLS	Vol. Flow Rate ACFM	Vol. Flow Rate SCFMD	Black Liquor Firing Rate (Tons/Hr)	Percent Isokinetic
12/02/98	1	1A	20.66	1.05	174218.0	86373.0	39.24 /2	98.6
12/02/98	2	1A	21.04	1.07	177051.0	86731.0	39.41 /2	99.4
12/02/98	3	1A	26.86	1.37	178027.0	87058.0	39.33 /2	99.5
		Mean	22.85	1.16	176432.0	86720.7	39.33 /2	99.1
12/02/98	1	1B	3.73	0.19	149353.0	74997.0	39.32 /2	101.1
12/03/98	2	1B	6.96	0.35	147781.0	74533.0	39.44 /2	101.4
12/03/98	3	1B	5.36	0.27	146627.0	75337.0	39.61 /2	100.5
		Mean	5.35	0.27	147920.3	74955.7	39.46 /2	101.0
		Total	28.20	0.72	324352.3	161676.3	39.39	

Mean determined as arithmetic average of the results for each of the three runs.

REMARKS: Allowable Emissions (Stacks A and B) = 3.0 lbs/Ton Black Liquor Solids
One Ton BLS = 3000 lbs