

1999 and prior



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

September 15, 1999

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
Stone Container Corp., Panama City Mill
Pulp Production Increase

Dear Mr. Prescott:

The Department has received the response to our initial incompleteness letter of August 17, 1999 on September 7, 1999, for an increase in the pulp production of the above referenced facility in Bay County. Based on our review of the response submitted and our meeting of September 7, 1999, we have determined that the project should undergo PSD New Source Review. Therefore, please submit an appropriate PSD application along with an additional \$7,250 processing fees to the Tallahassee Office. The \$250 submitted to the Pensacola Office with the minor source application will be transferred to Tallahassee. The two amounts will make up the \$7,500 required by Rule 62-4.050(4)(a)1, F.A.C., for PSD application review. The processing clock is stopped for this project and will resume for initial review after receipt of the PSD application and the deficient fees.

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

Sincerely,

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

AAL/sa

cc: Ed Middleswart, P.E., NWD
David A. Buff, P.E., Golder Associates Inc.

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

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SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

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

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

Consult postmaster for fee.

3. Article Addressed to:

Jack Prescott, Gen. Mgr.
Stone Container
1 Everett Ave
Panama City, FL
32402

4a. Article Number

2 333 618 143

4b. Service Type

- Registered Certified
- Express Mail Insured
- Return Receipt for Merchandise COD

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Jo Willey

6. Signature: (Addressee or Agent)

X Jo Willey

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PS Form 3811, December 1994

102595-98-B-0229

Domestic Return Receipt

Z 333 618 143

US Postal Service

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Sent to	
Jack Prescott	
Street & Number	
Stone Cont.	
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Panama City FL	
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Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
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Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	CC 50069-005-AC 9-15-99

PS Form 3800, April 1995

Eyed,

There were no AC's issued on the RBs' SDTs regarding the TRS rule, because the eu's were already under the TRS SIP limitations (March '72 SIP) established for them.

Bunn

9-9-99 Meeting

Smurfit-Stone: Panama City mill

Bruce Mitchell

FDEP

850/921-9506

SYED ARIEF

FDEP

850/921-9529

DAVID RILEY

SMURFIT-STONE

850/785-4311 EXT. 257

Tom Clements

" "

850 785-4311 X 470

Charles Ackel

Smurfit - Stone

904-714-7120

David A. Buff

Golden Associates

352-336-5600

Northwest District

Ed Middleworth

Rick Bradburn

Golder Associates Inc.

6241 NW 23rd Street, Suite 500
Gainesville, FL 32653-1500
Telephone (352) 336-5600
Fax (352) 336-6603



September 3, 1999

9937518

Florida Department of Environmental Protection
Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

RECEIVED

SEP 07 1999

BUREAU OF AIR REGULATION

Attention: Mr. Ed Middleswart, P.E.

Subject: File No. 0050009-005-AC
Stone Container Corp. Panama City Mill
Pulp Production Increase

Dear Mr. Middleswart:

This correspondence is in response to the Department's letter dated August 17, 1999, concerning the above referenced pulp production increase for Stone Container Corp.'s (SCC) Panama City mill. Responses to the Department's two comments are presented below:

1. Attached is the requested calculations, assumptions, etc., for the current actual emissions from the Panama City mill and the future potential emissions. These emissions are summarized and compared for PSD applicability in the attached Tables 1 through 4. Supportive calculations, assumptions etc., are provided for in Attachments A and B.

The baseline actual emissions (Table 1 and Attachment B) are based on the two year period 1997 and 1999. This two year period was selected because the mill was shutdown for three months in 1998 due to economic reasons, and therefore 1998 was not representative of normal operation. For 1999 actual operation, the mill is on track to reach the current permitted capacity of 668,850 TPY ADUP, therefore actual operation through August was prorated to agree with this pulp production rate.

The future potential emissions based on a pulp production rate of 781,000 TPY air-dried unbleached pulp (ADUP) are presented in Table 2 and Attachment A. The 781,000 TPY production rate is based on a maximum of 2,200 TPD ADUP for 365 days per year. Since the mill normally does not operate 365 days per year, this is an upper limit figure.

If Tables 1 and 2 are used as the basis for assessing PSD review applicability, then PSD review is triggered for nearly all PSD regulated pollutants (refer to Table 3). This would be true even if the future potential emissions were based on the current permitted pulp production rate of 668,850 TPY pulp, since the permitted rates of

most operating units remain unchanged regardless of the pulp production limit (i.e., recovery boilers, smelt tanks and lime kiln).

As a truer indication of the actual increase in emissions that would occur with the proposed pulp production increase, a comparison of current actual and future actual emissions is presented in Table 4. The future actual emissions are based on increasing the current actuals by the ratio of current to future production (667,426 TPY/781,000 TPY = 1.17). However, if this calculation resulted in future emissions greater than the potential emissions shown in Table 3, then the potential emissions from Table 3 were used.

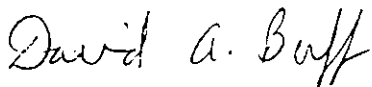
For the reasons stated in the application, we still believe that the increase can be permitted as a permit amendment, not requiring PSD review. Note that the Nos. 3 and 4 Combination Boilers were not included in the analysis, since these units are already operating at maximum to produce electricity for internal consumption. Therefore, the pulp production increase does not affect these units. All other units at the mill for which emissions can be quantified are included in the analysis.

2. Golder is currently working with EPA Region IV to obtain approval of the ISC-PRIME model for the Panama City mill. However, if it appears that EPA will not issue such approval in time for FDEP to issue a draft permit by the first of November, then SCC will submit model results based on the currently approved ISCST3 model.

Please call if you have any questions concerning this information. We stand ready to do everything necessary to obtain a final permit by November 1 of this year.

Sincerely,

GOLDER ASSOCIATES INC.



David A. Buff, P.E.
Principal Engineer
Florida P.E. # 19011

DB/arz

cc: Bruce Mitchell, FDEP Tallahassee
David Riley
Charlie Ackel
Bill Heatley

Table 3. Current Actual and Future Potential Emissions for Proposed Pulp Production of 781,000 TPY
Stone Container Corp., Panama City

Regulated Pollutant	BASELINE EMISSIONS (TPY)	FUTURE POTENTIAL EMISSIONS (TPY)	NET CHANGE (TPY)	Significant Emission Rate (TPY)	PSD Review Applies ?
Particulate (TSP)	610.3	1,433.4	823.1	25	Yes
Particulate (PM10)	500.8	1,155.4	654.6	15	Yes
Sulfur dioxide	1,048.9	1,166.1	117.1	40	Yes
Nitrogen oxides	739.4	845.2	105.8	40	Yes
Carbon monoxide	5,323.1	5,941.0	617.9	100	Yes
Volatile organic compds.	887.4	1,021.6	134.2	40	Yes
Sulfuric acid mist	47.4	71.4	24.1	7	Yes
Total Reduced Sulfur	165.5	318.3	152.8	10	Yes
Lead	0.32	0.40	0.080	0.6	No
Mercury	0.032	0.035	0.003	0.1	No
Beryllium	0.0023	0.0028	0.00043	0.00040	Yes
Fluorides	--	--	--	3	No

Table 4. Comparison of Current Actual and Future Actual Emissions for Proposed Pulp Production of 781,000 TPY
Stone Container Corp., Panama City

Regulated Pollutant	BASELINE EMISSIONS (TPY)	TOTAL FUTURE ACTUAL (a) (TPY)	NET CHANGE (TPY)	Significant Emission Rate (TPY)	PSD Review Applies ?
Particulate (TSP)	610.3	714.0	103.7	25	Yes
Particulate (PM10)	500.8	585.9	85.1	15	Yes
Sulfur dioxide	1,048.9	1,166.1 (b)	117.2	40	Yes
Nitrogen oxides	739.4	845.2 (b)	105.8	40	Yes
Carbon monoxide	5,323.1	5,941.0 (b)	617.9	100	Yes
Volatile organic compds.	887.4	1,021.6 (b)	134.2	40	Yes
Sulfuric acid mist	47.4	55.4	8.1	7	Yes
Total Reduced Sulfur	165.5	193.6	28.1	10	Yes
Lead	0.32	0.37	0.054	0.6	No
Mercury	0.032	0.037	0.005	0.1	No
Beryllium	0.0023	0.0027	0.00040	0.00040	Yes
Fluorides	--	--	--	3	No

(a) Based on increasing current actual emissions by the ratio of current actual to future potential pulp production (667,426 TPY ADUP current and 781,000 TPY ADUP future potential)
= ratio of 1.17

(b) Based on future potential emissions from Table 3, since applying ratio of 1.17 resulted in emissions greater than shown in Table 3.

ATTACHMENT A

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

Regulated Pollutant	Each Recovery Boiler				
	Emission Factor	Reference	Activity Factor (a)	Hourly Emissions (lb/hr)	Annual Emissions (TPY)
Particulate (PM)	112.5 lb/hr	1	8,760 hr/yr	112.5	492.8, <i>OK</i>
Particulate (PM10)	77.6 % of PM	6	—	87.30	382.4
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	1	187,100 dscfm (g)	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	—	—	—

note:

- (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 currently permitted maximum heat input of 721 MMBtu/hr, average No. 6 Fuel Oil heat content of 150,000 Btu/gal, and 8,760 hr/yr.
 (c) Maximum S = 2.5%.
 (d) Based on maximum heat input of 721 MMBtu/hr, average natural gas heat content of 1,000 Btu/scf, and 8,760 hr/yr.
 (e) Based on 3,570,000 gallons of No. 6 Fuel Oil per year.
 (f) Based on 535 MMscf of natural gas per year.
 (g) Based on firing with No. 6 Fuel Oil (only) for 742 hr/yr and BLS for the remaining 8,018 hr/yr.
 (h) Based on firing with No. 6 Fuel Oil for 742 hr/yr (only), natural gas for 742 hr/yr, and BLS for the remaining 7,276 hr/yr.
 (g) Based on 1997 compliance testing and 8% salt cake content of BLS throughput, ie. 92% virgin BLS.

References:

1. Currently permitted emission limit.
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% of SO₂ becomes SO₃ 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.
7. Based on NCASI Bulletin No. 416, Table 5 and Figure 17 (20 lb/1,000 lb BLS for hourly emissions and 5.3 lb/1,000 lb BLS for annual average).

Table A-2. Maximum Emissions From the Existing Bleach Plant, Smurfit-Stone Container, Panama City, Florida

Pollutant Name	Average Emission Factor (lb/tons ADBP)		Activity Factor (a) (tons ADBP/yr)	Annual Emissions (TPY)
<u>Carbon Monoxide</u>				
Hardwood	0.72	(b)	402,960	--
Softwood	0.88	(b)	402,960	177.30
Volatile Organic Compounds (measured as total hydrocarbons)	4.80E-01	(c)	402,960	96.71
Total Reduced Sulfur	3.10E-02	(d)	402,960	6.25

Notes:

ADBP = Air Dried Bleached Pulp

lb/hr = pounds per hour

TPY = tons per year

Footnotes:

(a) Based on the maximum rate of 1,104 tons ADBP/day and 365 days/yr of operation.

(b) Emission factors based on data in NCASI Technical Bulletin No. 760, Carbon Monoxide Emissions from Oxygen Delignification and Chlorine Dioxide Bleaching of Wood Pulp, July 1998.

Bleaching Stages:

Hardwood: Existing bleach plant design is 25.78 lb ClO₂/ODTUBP / 0.94 = 27.4 lb ClO₂/ODTBP = 1.4%

Using NCASI equation for hardwood (Figure 11): CO = (-0.03 x %ClO₂) + 0.69 lb/ODTBP

CO = 0.65 lb/ODTBP x 0.90 = 0.72 lb/ADTBP

Softwood: Existing bleach plant design is 35.5 lb ClO₂/ODTUBP / 0.94 = 37.8 lb ClO₂/ODTBP = 1.9%

Using NCASI equation for softwood (Figure 9): CO = (0.27 x %ClO₂) + 0.38 lb/ODTBP

CO = 0.79 lb/ODTBP x 0.90 = 0.88 lb/ADTBP

Maximum emissions based on 100% softwood.

(c) NCASI Technical Bulletin No. 701, Compilation of Air Toxic and Total Hydrocarbon Emissions Data for Sources at Chemical Wood Pulp Mills, Volume 1, October 1995, Table 3, for Mill BPII2.

(d) NCASI Technical Bulletin No. 701, Compilation of Air Toxic and Total Hydrocarbon Emissions Data for Sources at Chemical Wood Pulp Mills, Volume 1, October 1995, Table 3, for Mill BPIF2.

Table A-3. Maximum Emissions from Pulping Area (Brown Stock Washing) at Stone Container, Panama City.

Regulated Pollutant	Emission Factor	Reference	Activity Factor	Annual Emissions (TPY)
VOC	0.18 lb C/ton ADUP	2	781,000 ton ADUP/yr	70.3
Total reduced sulfur	0.22 lb/ton ADUP	1	781,000 ton ADUP/yr	85.9

References

1. Based on NCASI Technical Bulletin No. 701, page 77, 79, and 81 (Table 5).
2. Based on NCASI Technical Bulletin No. 701, page 89 (Table 5).

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)	29.71 lb/hr	1	8,760 hr/yr	29.7	130.1
Particulate (PM10)	89.5 % of PM	2	--	26.6	116.5
Sulfur dioxide	0.016 lb/ton BLS	3	61.85 tons BLS/hr	0.99	4.33
Nitrogen oxides	0.033 lb/ton BLS	3	61.85 tons BLS/hr	2.04	8.94
Carbon monoxide	--	--	--	--	--
VOC	0.062 lb/ton BLS	3	61.85 tons BLS/hr	3.83	16.8
Sulfuric acid mist	5 % of SO ₂	5	--	0.061	0.27
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	0.005
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	--	--	--	--	--

note:

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

References:

1. Currently permitted emission limit.
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)	28.5 lb/hr	1	8,760 hr/yr	28.5	124.9
Particulate (PM10)	89.5 % of PM	2	--	25.5	111.8
Sulfur dioxide	0.016 lb/ton BLS	3	61.85 tons BLS/hr	0.99	4.33
Nitrogen oxides	0.033 lb/ton BLS	3	61.85 tons BLS/hr	2.04	8.94
Carbon monoxide	--	--	--	--	--
VOC	0.062 lb/ton BLS	3	61.85 tons BLS/hr	3.83	16.8
Sulfuric acid mist	5 % of SO ₂	5	--	0.061	0.27
Total reduced sulfur	0.048 lb/ton BLS	1	61.85 tons BLS/hr	3.0	13.0
Lead	1.7E-05 lb/ton BLS	4	61.85 tons BLS/hr	0.001	0.005
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	--	--	--	--	--

note:

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

References:

1. Currently permitted emission limit.
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).

Table A-6. Maximum Emissions from the Woodyard at Stone Container, Panama City

SOURCE	Type of Operation (a)	M Moisture Content (%)	U Wind Speed (MPH)	Uncontrolled Emission Factor	Type of Control	Control Efficiency (%)	Controlled Emission Factor	Activity Factor	Maximum Annual PM Emissions (tons/yr)	PM10 Size Multiplier (c)	Maximum Annual PM10 Emissions (tons/yr)
ROUNDWOOD HANDLING											
Debarker	Debarking	--	--	0.024 lbs/ton (d)	Enclosure	80	0.00480 lbs/ton	1,946,934 TPY (e)	4.673	0.35	1.635
Chipper	Continuous Drop	30	7.8	0.00013 lbs/ton	None	0	0.00013 lbs/ton	1,946,934 TPY (e)	0.125	0.35	0.044
Chip Surge Bin to Conveyor	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.00003 lbs/ton	1,946,934 TPY (e)	0.025	0.35	0.0088
Conveyor to Tower No. 1 Chip Diverter	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.00003 lbs/ton	1,946,934 TPY (e)	0.025	0.35	0.0088
BARK HANDLING											
Debarker to Bark Conveyor	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.00003 lbs/ton	155,755 TPY (f)	0.0020	0.35	0.00070
Bark Conveyor to No. 1 Bark Diverter	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.00003 lbs/ton	155,755 TPY (f)	0.0020	0.35	0.00070
No. 1 Bark Diverter to Emergency Bark Storage Pile	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.00003 lbs/ton	0 TPY (f)	0.0000	0.35	0.00000
Emergency Bark Storage Pile	Wind Erosion	--	--	--	None	0	--	--	0.0094	1.0	0.0094
Unhogged Bark Storage Pile	Wind Erosion	--	--	--	None	0	--	--	0.0094	1.0	0.0094
Trucked Bark to Purchased Unhogged Bark Storage Pile	Batch Drop	30	7.8	0.00013 lbs/ton	None	0	0.00013 lbs/ton	316,098 TPY (g)	0.0203	0.35	0.00712
Front End Loaded to Bark Hopper	Batch Drop	30	7.8	0.00013 lbs/ton	None	0	0.00013 lbs/ton	316,098 TPY (g)	0.0203	0.35	0.00712
Wastewood Conveyor to No. 1 Bark Diverter	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	316,098 TPY (g)	0.0041	0.35	0.00142
No. 1 Bark Diverter to Disc Screen	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	471,853 TPY (h)	0.0061	0.35	0.00213
Bark Hog	Hammermill	--	--	0.024 lbs/ton (d)	Enclosed	80	0.00480 lbs/ton	471,853 TPY (h)	1.132	1.0	1.132
Bark Hog to Hogged Bark Conveyor	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	471,853 TPY (h)	0.0061	0.35	0.00213
Hogged Bark Conveyor to Hogged Bark Pile	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	471,853 TPY (h)	0.0061	0.35	0.00213
Hogged Bark Pile	Wind Erosion	--	--	--	None	0	--	--	0.0023	1.0	0.0023
Bark Bin Cyclone	Cyclone Vent	--	--	2.0 lb/hr	Cyclone	0	2.0 lb/hr	8.760 hr/yr	8.76	0.35	3.07
Bark Bin Cyclone to Small Bark Bin and Screw	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	471,853 TPY (h)	0.0061	0.35	0.00213
Small Bark Bin and Screw to Bark Conveyor	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	471,853 TPY (h)	0.0061	0.35	0.00213
Bark Conveyor to No. 2 Bark Diverter	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	471,853 TPY (h)	0.0061	0.35	0.00213
Bark Storage Pile Maintenance	Vehicular Traffic	--	--	0.74 lbs/VMT	None	0	0.74 lbs/VMT	21,900 VMT (i)	8.103	0.35	2.836
PURCHASED CHIP HANDLING											
Truck Unloading (Chip Van Hopper)	Batch Drop	30	7.8	0.00013 lbs/ton	Covered	60	0.000051 lbs/ton	762,300 TPY (j)	0.020	0.35	0.0069
Railcar Unloading (Chip Van Hopper)	Batch Drop	30	7.8	0.00013 lbs/ton	Covered	60	0.000051 lbs/ton	762,300 TPY (j)	0.020	0.35	0.0069
Truck Unloading Conveyor to Tower No. 1 Chip Diverter	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	762,300 TPY (j)	0.010	0.35	0.0034
Railcar Unloading Conveyor to Tower No. 1 Chip Diverter	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	762,300 TPY (j)	0.010	0.35	0.0034
MANUFACTURED AND PURCHASED CHIP PROCESSING											
Tower No. 1 Diverter to Chip Conveyor (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	3,315,779 TPY (k)	0.043	0.35	0.015
Chip Conveyor to Tower No. 2 Diverter (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	3,315,779 TPY (k)	0.043	0.35	0.015
Tower No. 2 Diverter to Chip Reclaim Conveyor (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	3,315,779 TPY (k)	0.043	0.35	0.015
Chip Reclaim Conveyor to Radial Conveyor (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	3,315,779 TPY (k)	0.043	0.35	0.015
Radial Conveyor to Chip Reclaimer Storage Pile (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	3,315,779 TPY (k)	0.043	0.35	0.015
Chip Reclaimer Storage Pile (2)	Wind Erosion	--	--	--	None	0	--	--	0.048	1.0	0.048
Chip Reclaimer Storage Pile to Chip Conveyor (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	3,315,779 TPY (k)	0.043	0.35	0.015
Chip Conveyor to Tower No. 2 Diverter (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	3,315,779 TPY (k)	0.043	0.35	0.015
Tower No. 2 Diverter to Chip Screw (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	3,315,779 TPY (k)	0.043	0.35	0.015
Chip Screw to Primary Screen (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	3,315,779 TPY (k)	0.043	0.35	0.015
Chip Screens	Screening	--	--	--	--	--	--	--	--	--	--
Softwood Primary Screen Cyclone	Cyclone Vent	--	--	2.0 lb/hr	Cyclone, Enclosure	80	0.40 lb/hr	8,760 hr/yr	1.752	0.35	0.613
Hardwood Primary Screen Cyclone	Cyclone Vent	--	--	2.0 lb/hr	Enclosure	80	0.40 lb/hr	8,760 hr/yr	1.752	0.35	0.613
Primary Screen to Secondary Screen (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	3,315,779 TPY (k)	0.043	0.35	0.015
Secondary Screen to Chip Conveyor (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	2,321,045 TPY (l)	0.030	0.35	0.010
Screen Building Rejects Cyclone	Cyclone Vent	--	--	2.0 lb/hr	None	0	2.0 lb/hr	8,760 hr/yr	8.760	0.35	3.066
Screen Building Rejects Cyclone to Chip Conveyor	Continuous Drop	30	7.8	0.00013 lbs/ton	Covered	60	0.000051 lbs/ton	994,734 TPY (m)	0.026	0.35	0.009
Fines Blowline Emergency Storage Pile	Wind Erosion	--	--	--	None	0	--	--	0.00017	1.0	0.00017
Fines Blowline Cyclone	Cyclone Vent	--	--	2.0 lb/hr	None	0	2.0 lb/hr	8,760 hr/yr	8.760	0.35	3.07
Fines Blowline Cyclone to Wastewood/Sludge Conveyor	Continuous Drop	30	7.8	0.00013 lbs/ton	Covered	60	0.000051 lbs/ton	9,947 TPY (n)	0.000	0.35	0.000
Chip Conveyor to No. 5 Transfer Tower (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	3,305,772 TPY (o)	0.043	0.35	0.015
TOTAL									44.61		16.39

Notes:

- (a) Batch Drop and Continuous Drop Emission Factors are computed from AP-42 (US EPA, 1995) Section 13.2.4-3(1). $E = 0.0032 \times (U/5)^{1.3} / (M/2)^{1.4}$ lb/ton
- (b) Wind Erosion Emissions based on AP-42 (US EPA, 1995) Section 13.2.5. Refer to Attachment A for derivation.
- (c) PM10 Size Multiplier is based on particles < 10 micrometers.
- (d) Debarker emissions are based on Table 28 of NCASI Technical Bulletin No. 474 (March 1984), Fugitive Dust Emission Factors and Control Methods Important to Forest Products Industry Manufacturing Operations.
- (e) Roundwood throughput is based on 466,800 cords/yr (softwood) @ 2.7 tons/cord and 178,800 cords/yr (hardwood) @ 2.85 tons/cord, plus 10 percent.
- (f) Bark throughput is based on 8 percent of roundwood.
- (g) Based on purchased bark.
- (h) Total bark throughput is sum of manufactured bark and purchased bark.
- (i) Vehicle miles traveled (VMT) was calculated assuming front end loader operating 12 hrs/day, 365 days/yr in the woodyard.
- (j) Purchased chip throughput is based on 142,800 cords/yr (softwood) and 411,600 cords/yr (hardwood) @ 2.5 tons/cord, plus 10 percent.
- (k) Total chip throughput is based on 92 percent of roundwood throughput plus purchased chip throughput.
- (l) Based on 70% of total chip throughput.
- (m) Based on 30% of total chip throughput.
- (n) Fines separated from wood chip stream.
- (o) Total chips minus fines.

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 (PM10)	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)	1	68,000 dscfm	7.27	31.9
Lead	3.8E-03 lb/ton CaO	3	20.4 ton CaO/hr	7.8E-02	3.4E-01
Mercury	9.1E-06 lb/ton CaO	3	20.4 ton CaO/hr	1.9E-04	8.1E-04
Beryllium	1.7E-05 lb/ton CaO	3	20.4 ton CaO/hr	3.5E-04	1.5E-03
Fluorides	--	--	--	--	--

Footnotes

- (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.

References

1. Currently permitted emission limit.
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.

Table A-8. Maximum Emissions from Lime Slaker at Stone Container, Panama City

Regulated Pollutant	Emission Factor	Reference	Activity Factor (a)	Hourly Emissions (lb/hr)	Annual Emissions (TPY)
Particulate (PM)	4.0 lb/hr	1	8,760 hr/yr	4.0	17.5
Particulate (PM10)	100 % of PM	3	--	4.0	17.5
VOC	4.4E-02 lb/ton CaO	2	28.1 ton CaO/hr (b)	1.24	5.4
Total reduced sulfur	ND	2	--	--	--

ND = Non-detectable

Footnotes

(a) Based on ratio of 1997 CaO production and pulp production to proposed pulp production plus 10% (purchased lime) and 8,760 hr/yr.

(b) 10% impurities included

References

1. Currently permitted emission limit.
2. Based on NCASI Technical Bulletin No. 701, page 237 and Table 17.
3. No data found, assume 100%.

Table A-9. Maximum Emissions from Chemical Recovery Area at Stone Container, Panama City.

Regulated Pollutant	Emission Factor	Reference	Activity Factor (a)	Annual Emissions (TPY)
<u>VOC</u>				
Black Liquor Oxidation Towers	0.34 lb C/ton ADUP	1	781,000 ton ADUP/hr	132.8
Causticizers	0.044 lb C/ton CaO	4	246,156 ton CaO/yr	5.4
Lime Mud Filters/Associated Equipment	0.0041 lb C/ton CaO	4	246,156 ton CaO/yr	0.5
Black Liquor Tanks (2)	0.091 lb/tank/hr	2	2 tanks	0.8
Black Liquor Oxidation Tank	0.1 lb/ton BLS	3	1,083,612 ton BLS/yr	54.2
Green Liquor Clarifiers and Tanks	0.0014 lb C/ton CaO	4	246,156 ton CaO/yr	<u>0.2</u>
			TOTAL VOC's	193.8
<u>Total Reduced Sulfur</u>				
Black Liquor Oxidation Towers	ND	1	--	--
Causticizers	ND	4	--	--
Lime Mud Filters/Associated Equipment	0.0005 lb /ton CaO	4	246,156 ton CaO/yr	0.1
Black Liquor Tanks (2)	0.18 lb/tank/hr	2	2 tanks	1.6
Black Liquor Oxidation Tank	0.0271 lb/ton BLS	3	1,083,612 ton BLS/yr	14.7
Green Liquor Clarifiers and Tanks	7.011E-04 lb C/ton CaO	4	246,156 ton CaO/yr	<u>0.1</u>
			TOTAL TRS	16.4

ND = Non-detectable

Footnotes

(a) Based on proposed maximum hourly lime slaker rate (28.1 tons/hr CaO), proposed pulp production rate, and currently permitted recovery boiler rates.

References

1. Based on NCASI Technical Bulletin No. 646, pages 27 and 28.
2. Based on NCASI Technical Bulletin No. 701, pages 111-115 (Table 7).
3. Based on NCASI Technical Bulletin No. 701, pages 145-154 (Table 11).
4. Based on NCASI Technical Bulletin No. 701, pages 237-240 (Table 17).

Table A-10. Maximum Emissions from Paper Making Area at Stone Container, Panama City.

Regulated Pollutant	Emission Factor	Reference	Activity Factor	Annual Emissions (TPY)
VOC	0.60 lb C/ton ADUP	1	781,000 ton ADUP/yr	234.3
Total reduced sulfur	ND	1	--	--

ND = Non-detectable

References

1. Based on NCASI Technical Bulletin No. 701, page 3, Table 18 (pages 243 and 244).

ATTACHMENT B

Table B-1. 1997/1999 Baseline Emissions from No. 1 Recovery Boiler at Stone Container Corporation, Panama City

Regulated Pollutant	Emission Factor	Reference	Activity Factor (a)	Annual Emissions (TPY)
Particulate (PM)	34.5 lb/hr	1	8,530 hr/yr	147.1
Particulate (PM10)	77.6 % of PM	6	—	114.2
Sulfur dioxide	0.18 lb/MMBtu	3	5.73E+06 MMBtu/yr	515.7
Nitrogen oxides	0.10 lb/MMBtu	3	5.73E+06 MMBtu/yr	286.5
Carbon monoxide	5.3 lb/1,000 lb BLS	7	982,878 1,000 lb BLS/yr	2,604.6
VOC	0.058 lb C/MMBtu	3	5.73E+06 MMBtu/yr	166.2
Sulfuric acid mist	0.011 lb/MMBtu	5	5.73E+06 MMBtu/yr	31.6
Total reduced sulfur	8.0 ppmvd	1	142,000 dscfm	25.65
Lead	7.2E-06 lb/MMBtu	2	5.73E+06 MMBtu/yr	2.1E-02
Mercury	5.5E-06 lb/MMBtu	2	5.73E+06 MMBtu/yr	1.6E-02
Beryllium	1.9E-07 lb/MMBtu	2	5.73E+06 MMBtu/yr	5.4E-04
Fluorides	ND	4	—	—

ND = Non-detectable

ton = 2000 lb.

note:

- (a) Heat input rate based on 1997 and projected 1999 BLS burned and 5,830 Btu/lb BLS
 1999 (projected): 487,000 tons burned
 1997: 495,878 tons burned

References:

- Based on the average of the 1997 and 1999 compliance tests and operating data:
 1999 = 28.2 lb PM/hr; 7.8 ppmvd TRS at 142,000 dscfm for 8,544 hr/yr (tests conducted Dec. '98)
 1997 = 40.8 lb PM/hr; 8.2 ppmvd TRS at 142,000 dscfm for 8,516 hr/yr
- Emission factor based on NCASI Bulletin No. 650, Table 11D, direct contact evaporator, average factor used.
- Emission factor based on NCASI Bulletin No. 646, page 16 and Tables 10 and 11, direct contact evaporator with ESP, average factor used.
- From "Application of Combustion Modifications to Industrial Combustion Equipment" EPA-600/7-79-015a. one test from recovery boiler.
- Based on similar derivation of sulfuric acid mist from AP-42 for fuel oil. Five percent (5%) of SO₂ becomes SO₃, then take into account the ratio of sulfuric acid mist and gaseous sulfate molecular weights (98/80).
- Based on AP-42 Table 10.2-2, and Figure 10.2-2 for Kraft pulping sources.
- Based on NCASI Bulletin No. 416, Table 5.

Table B-2. 1997/1999 Baseline Emissions from No. 2 Recovery Boiler at Stone Container Corporation, Panama City

Regulated Pollutant	Emission Factor	Reference	Activity Factor (a)	Annual Emissions (TPY)
Particulate (PM)	30.3 lb/hr	1	8,488 hr/yr	128.4
Particulate (PM10)	77.6 % of PM	6	—	99.6
Sulfur dioxide	0.18 lb/MMBtu	3	5.66E+06 MMBtu/yr	509.3
Nitrogen oxides	0.10 lb/MMBtu	3	5.66E+06 MMBtu/yr	282.9
Carbon monoxide	5.3 lb/1,000 lb BLS	7	970,562 1,000 lb BLS/yr	2,572.0
VOC	0.058 lb C/MMBtu	3	5.66E+06 MMBtu/yr	164.1
Sulfuric acid mist	0.005 lb/MMBtu	5	5.66E+06 MMBtu/yr	14.3
Total reduced sulfur	10.2 ppmvd	1	142,000 dscfm	32.54
Lead	7.2E-06 lb/MMBtu	2	5.66E+06 MMBtu/yr	2.0E-02
Mercury	5.5E-06 lb/MMBtu	2	5.66E+06 MMBtu/yr	1.6E-02
Beryllium	1.9E-07 lb/MMBtu	2	5.66E+06 MMBtu/yr	5.4E-04
Fluorides	ND	4	—	—

ND = Non-detectable

ton = 2000 lb.

note:

(a) Heat input rate based on 1997 and 1999 (projected) BLS burned and 5,830 Btu/lb BLS:

1999 (projected): 483,509 tons burned

1997: 487,053 tons burned

References:

- Based on the average of the 1997 and 1999 compliance tests and operating data:
1999 = 19.6 lb PM/hr; 10.0 ppmvd TRS at 142,000 dscfm for 8,526 hr/yr (tests conducted Dec. '98)
1997 = 40.9 lb PM/hr; 10.4 ppmvd TRS at 142,000 dscfm for 8,449 hr/yr
- Emission factor based on NCASI Bulletin No. 650, Table 11D, direct contact evaporator, average factor used.
- Emission factor based on NCASI Bulletin No. 646, page 16 and Tables 10 and 11, direct contact evaporator with ESP, average factor used.
- From "Application of Combustion Modifications to Industrial Combustion Equipment" EPA-600/7-79-015a.
one test from recovery boiler.
- Based on similar derivation of sulfuric acid mist from AP-42 for fuel oil. Five percent (5%) of SO₂ becomes SO₃ then take into account the ratio of sulfuric acid mist and gaseous sulfate molecular weights (98/80).
- Based on AP-42 Table 10.2-2, and Figure 10.2-2 for Kraft pulping sources.
- Based on NCASI Bulletin No. 416, Table 5.

Table B-3. 1997/1999 Baseline Emissions from Lime Kiln (No. 6 Fuel Oil Fired) at Stone Container, Panama City.

Regulated Pollutant	Emission Factor	Reference	Activity Factor (a)	Annual Emissions (TPY)
Particulate (PM)	25.1 lb/hr	1	8,368 hr/yr	104.8
Particulate (PM10)	98.3 % of PM	2	--	103.0
Sulfur dioxide	0.23 lb/ton CaO	4	140,485 ton CaO/yr	16.2
Nitrogen oxides	2.19 lb/ton CaO	4	140,485 ton CaO/yr	153.8
Carbon monoxide	0.22 lb/ton CaO	6	140,485 ton CaO/yr	15.5
VOC	0.24 lb C/ton CaO	4	140,485 ton CaO/yr	16.6
Sulfuric acid mist	0.014 lb/ton CaO	5	140,485 ton CaO/yr	1.0
Total reduced sulfur	7.85 ppmvd (b)	1	45,000 dscfm	7.82
Lead	3.8E-03 lb/ton CaO	3	140,485 ton CaO/yr	0.27
Mercury	9.1E-06 lb/ton CaO	3	140,485 ton CaO/yr	6.4E-04
Beryllium	1.7E-05 lb/ton CaO	3	140,485 ton CaO/yr	1.2E-03
Fluorides	--	--	--	--

Footnotes

(a) 1997 and 1999 CaO production and pulp production:

1999 = 668,850 ton ADUP; 143,735 tons CaO (10% impurities)

1997 = 666,002 ton ADUP; 168,454 tons CaO (10% Impurities)

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

References

1. Compliance testing and operating rates:

1999: 28.5 lb PM/hr, 5.1 ppmvd TRS, and 8,348 hr/yr

1997: 21.6 lb PM/hr, 10.6 ppmvd TRS, and 8,388 hr/yr

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. Five percent (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.

Table B-4. 1997/1999 Baseline Emissions From the Existing Bleach Plant, Smurfit-Stone Container, Panama City

Pollutant Name	Average Emission Factor (lb/ADTBP)	1997/1999 Average Process Rate (a) (ADTBP/yr)	Emission Rate (TPY)
<u>Carbon Monoxide</u>			
Hardwood	0.72 (b)	204,246	73.53
Softwood	0.88 (b)	<u>130,584</u>	<u>57.46</u>
TOTAL		334,830	130.99
Volatile Organic Compounds (measured as total hydrocarbons)	0.48 (c)	334,830	80.36
Total Reduced Sulfur	0.031 (d)	334,830	5.19

Notes:

ADTUBP = Air Dried Tons of Unbleached Bleached Pulp

ODTUBP = Oven Dried Tons of Unbleached Bleached Pulp

ADTBP = Air Dried Tons of Bleached Pulp

ODTBP = Oven Dried Tons of Bleached Pulp

lb/hr = pounds per hour

TPY = tons per year

Footnotes:

(a) Based on the average of 1999 (projected 334,862 ADTBP) and 1997 (334,797 ADTBP) annual production and a hardwood/softwood split of 61%/39%.

(b) Emission factors based on data in NCASI Technical Bulletin No. 760, Carbon Monoxide Emissions from Oxygen Delignification and Chlorine Dioxide Bleaching of Wood Pulp, July 1998.

Bleaching Stages:

Hardwood: Existing bleach plant design is 25.78 lb ClO₂/ODTUBP / 0.94 = 27.4 lb ClO₂/ODTBP = 1.4%

Using NCASI equation for hardwood (Figure 11): CO = (-0.03 x %ClO₂) + 0.69 lb/ODTBP

CO = 0.65 lb/ODTBP x 0.90 = 0.72 lb/ADTBP

Softwood: Existing bleach plant design is 35.5 lb ClO₂/ODTUBP / 0.94 = 37.8 lb ClO₂/ODTBP = 1.9%

Using NCASI equation for softwood (Figure 9): CO = (0.27 x %ClO₂) + 0.38 lb/ODTBP

CO = 0.79 lb/ODTBP x 0.90 = 0.88 lb/ADTBP

(c) NCASI Technical Bulletin No. 701, Compilation of Air Toxic and Total Hydrocarbon Emissions Data for Sources at Chemical Wood Pulp Mills, Volume 1, October 1995, Table 3, for Mill BPII2.

(d) NCASI Technical Bulletin No. 701, Compilation of Air Toxic and Total Hydrocarbon Emissions Data for Sources at Chemical Wood Pulp Mills, Volume 1, October 1995, Table 3, for Mill BPIF2.

Table B-5. 1997/1999 Baseline Emissions from Pulping Area (Brown Stock Washing) at Stone Container, Panama City.

Regulated Pollutant	Emission Factor	Reference	Activity Factor (a)	Annual Emissions (TPY)
VOC	0.18 lb C/ton ADUP	1	667,426 ton ADUP/yr	60.1
Total reduced sulfur	0.22 lb/ton ADUP	2	667,426 ton ADUP/yr	73.4

Footnotes

(a) 1997 and 1999 average pulp production:

1999 = 668,850 ton ADUP

1997 = 666,002 ton ADUP

References:

1. Based on NCASI Technical Bulletin No. 701, page 89 (Table 5).
2. Based on NCASI Technical Bulletin No. 701, page 77, 79, and 81 (Table 5).

Table B-6. 1997/1999 Baseline Emissions from Lime Slaker at Stone Container, Panama City.

Regulated Pollutant	Emission Factor	Reference	Activity Factor (a)	Annual Emissions (TPY)
Particulate (PM)	0.45 lb/hr	1	8,370 hr/yr	1.9
Particulate (PM10)	100 % of PM	2	--	1.9
VOC	0.044 lb /ton CaO	3	140,485 ton CaO/yr	3.1
Total reduced sulfur	ND	3	--	--

ND = Non-detectable

Footnotes

(a) 1997 and 1999 CaO production:

1999 = 143,735 tons CaO (10% impurities)

1997 = 168,454 tons CaO (10% impurities)

References

1. Compliance testing and operating hours:

1999: 0.53 lb PM/hr and 8,348 hr/yr

1997: 0.37 lb PM/hr and 8,392 hr/yr

2. No data found, assume 100% of PM.

3. Based on NCASI Technical Bulletin No. 701, page 237 and Table 17.

Table B-7. 1997/1999 Baseline Emissions from the Woodyard at Stone Container, Panama City

SOURCE	Type of Operation (a)	M Moisture Content (%)	U Wind Speed (MPH)	Uncontrolled Emission Factor	Type of Control	Control Efficiency (%)	Controlled Emission Factor	Activity Factor	Maximum Annual PM Emissions (tons/yr)	PM10 Size Multiplier (c)	Maximum Annual PM10 Emissions (tons/yr)
BOUNDWOOD HANDLING											
Debarker	Debarking	--	--	0.024 lbs/ton (d)	Enclosure	80	0.00480 lbs/ton	1,298,492 TPY (e)	3.116	0.35	1.091
Chipper	Continuous Drop	30	7.8	0.00013 lbs/ton	None	0	0.00013 lbs/ton	1,298,492 TPY (e)	0.084	0.35	0.029
Chip Surge Bin to Conveyor	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.00003 lbs/ton	1,298,492 TPY (e)	0.017	0.35	0.0059
Conveyor to Tower No. 1 Chip Diverter	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.00003 lbs/ton	1,298,492 TPY (e)	0.017	0.35	0.0059
BARK HANDLING											
Debarker to Bark Conveyor	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.00003 lbs/ton	103,879 TPY (f)	0.0013	0.35	0.00047
Bark Conveyor to No. 1 Bark Diverter	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.00003 lbs/ton	103,879 TPY (f)	0.0013	0.35	0.00047
No. 1 Bark Diverter to Emergency Bark Storage Pile	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.00003 lbs/ton	0 TPY (f)	0.0000	0.35	0.00000
Emergency Bark Storage Pile	Wind Erosion	--	--	--	None	0	--	--	0.0094	1.0	0.0094
Unhogged Bark Storage Pile	Wind Erosion	--	--	--	None	0	--	--	0.0094	1.0	0.0094
Trucked Bark to Purchased Unhogged Bark Storage Pile	Batch Drop	30	7.8	0.00013 lbs/ton	None	0	0.00013 lbs/ton	216,722 TPY (g) (r)	0.0139	0.35	0.00488
Front End Loaded to Bark Hopper	Batch Drop	30	7.8	0.00013 lbs/ton	None	0	0.00013 lbs/ton	216,722 TPY (g) (r)	0.0139	0.35	0.00488
Wastewood Conveyor to No. 1 Bark Diverter	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	216,722 TPY (g) (r)	0.0028	0.35	0.00098
No. 1 Bark Diverter to Disc Screen	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	320,601 TPY (h)	0.0041	0.35	0.00144
Bark Hog	Hammermill	--	--	0.024 lbs/ton (d)	Enclosed	80	0.00480 lbs/ton	320,601 TPY (h)	0.789	1.0	0.789
Bark Hog to Hogged Bark Conveyor	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	320,601 TPY (h)	0.0041	0.35	0.00144
Hogged Bark Conveyor to Hogged Bark Pile	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	320,601 TPY (h)	0.0041	0.35	0.00144
Hogged Bark Pile	Wind Erosion	--	--	--	None	0	--	--	0.0023	1.0	0.0023
Bark Bin Cyclone	Cyclone Vent	--	--	2.0 lb/hr	Cyclone	0	2.0 lb/hr	8,485 hr/yr	8.49	0.35	2.97
Bark Bin Cyclone to Small Bark Bin and Screw	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	320,601 TPY (h)	0.0041	0.35	0.00144
Small Bark Bin and Screw to Bark Conveyor	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	320,601 TPY (h)	0.0041	0.35	0.00144
Bark Conveyor to No. 2 Bark Diverter	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	320,601 TPY (h)	0.0041	0.35	0.00144
Bark Storage Pile Maintenance	Vehicular Traffic	--	--	0.74 lbs/VMT	None	0	0.74 lbs/VMT	21,900 VMT (i)	8.103	0.35	2.836
PURCHASED CHIP HANDLING											
Truck Unloading (Chip Van Hopper)	Batch Drop	30	7.8	0.00013 lbs/ton	Covered	60	0.000051 lbs/ton	578,294 TPY (j) (p)	0.015	0.35	0.0052
Railcar Unloading (Chip Van Hopper)	Batch Drop	30	7.8	0.00013 lbs/ton	Covered	60	0.000051 lbs/ton	578,294 TPY (j) (p)	0.015	0.35	0.0052
Truck Unloading Conveyor to Tower No. 1 Chip Diverter	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	578,294 TPY (j)	0.007	0.35	0.0026
Railcar Unloading Conveyor to Tower No. 1 Chip Diverter	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	578,294 TPY (j)	0.007	0.35	0.0026
MANUFACTURED AND PURCHASED CHIP PROCESSING											
Tower No. 1 Diverter to Chip Conveyor (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	2,351,201 TPY (k)	0.030	0.35	0.011
Chip Conveyor to Tower No. 2 Diverter (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	2,351,201 TPY (k)	0.030	0.35	0.011
Tower No. 2 Diverter to Chip Reclaim Conveyor (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	2,351,201 TPY (k)	0.030	0.35	0.011
Chip Reclaim Conveyor to Radial Conveyor (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	2,351,201 TPY (k)	0.030	0.35	0.011
Radial Conveyor to Chip Reclaimer Storage Pile (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	2,351,201 TPY (k)	0.030	0.35	0.011
Chip Reclaimer Storage Pile (2)	Wind Erosion	--	--	--	None	0	--	--	0.048	1.0	0.048
Chip Reclaimer Storage Pile to Chip Conveyor (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	2,351,201 TPY (k)	0.030	0.35	0.011
Chip Conveyor to Tower No. 2 Diverter (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	2,351,201 TPY (k)	0.030	0.35	0.011
Tower No. 2 Diverter to Chip Screw (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	2,351,201 TPY (k)	0.030	0.35	0.011
Chip Screw to Primary Screen (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	2,351,201 TPY (k)	0.030	0.35	0.011
Chip Screens	Screening	--	--	--	None	0	--	--	0.030	0.35	0.011
Softwood Primary Screen Cyclone	Cyclone Vent	--	--	2.0 lb/hr	Cyclone, Enclosure	80	0.40 lb/hr	8,485 hr/yr	1.697	0.35	0.594
Hardwood Primary Screen Cyclone	Cyclone Vent	--	--	2.0 lb/hr	Enclosure	80	0.40 lb/hr	8,485 hr/yr	1.697	0.35	0.594
Primary Screen to Secondary Screen (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	2,351,201 TPY (k)	0.030	0.35	0.011
Secondary Screen to Chip Conveyor (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	1,645,841 TPY (l)	0.021	0.35	0.007
Screen Building Rejects Cyclone	Cyclone Vent	--	--	2.0 lb/hr	None	0	2.0 lb/hr	8,485 hr/yr	8.485	0.35	2.970
Screen Building Rejects Cyclone to Chip Conveyor	Continuous Drop	30	7.8	0.00013 lbs/ton	Covered	60	0.000051 lbs/ton	705,380 TPY (m)	0.018	0.35	0.006
Fines Blowline Emergency Storage Pile	Wind Erosion	--	--	--	None	0	--	--	0.00017	1.0	0.00017
Fines Blowline Cyclone	Cyclone Vent	--	--	2.0 lb/hr	None	0	2.0 lb/hr	8,485 hr/yr	8.485	0.35	2.97
Fines Blowline Cyclone to Wastewood/Sludge Conveyor	Continuous Drop	30	7.8	0.00013 lbs/ton	Covered	60	0.000051 lbs/ton	47,024 TPY (n) (q)	0.001	0.35	0.000
Chip Conveyor to No. 5 Transfer Tower (2)	Continuous Drop	30	7.8	0.00013 lbs/ton	Enclosed	80	0.000026 lbs/ton	2,304,177 TPY (o)	0.030	0.35	0.010
TOTAL									41.50		15.07

Notes:

- (a) Batch Drop and Continuous Drop Emission Factors are computed from AP-42 (US EPA, 1995) Section 13.2.4-3(1). $E = 0.0032 \times (W/S)^{1.3} / (M/Z)^{1.4}$ lbs/ton
- (b) Wind Erosion Emissions based on AP-42 (US EPA, 1995) Section 13.2.5. Refer to Attachment A for derivation
- (c) PM10 Size Multiplier is based on particles < 10 micrometers
- (d) Debarker emissions are based on Table 28 of NCASI Technical Bulletin No. 424 (March 1984), Fugitive Dust Emission Factors and Control Methods Important to Forest Products Industry Manufacturing Operations.
- (e) Average roundwood throughput is based on 2.7 tons/cord for softwood and 2.85 tons/cord hardwood.
1997: 337,335 cords/yr (softwood) and 126,410 cords/yr (hardwood)
1999 (projected): 307,576 cords/yr (softwood) and 173,844 cords/yr (hardwood)
- (f) Bark throughput is based on 6 percent of roundwood.
- (g) Based on purchased bark.
- (h) Total bark throughput is sum of manufactured and purchased bark
- (i) Vehicle miles traveled (VMT) was calculated assuming front end loader operating 12 hrs/day, 365 days/yr in the woodyard.
- (j) Purchased chip throughput is based on 2.5 tons/cord.
1997: 94,745 cords/yr (softwood) and 370,474 cords/yr (hardwood)
1999 (projected): 116,262 cords/yr (softwood) and 343,789 cords/yr (hardwood)
- (k) Total chip throughput is based on 92 percent of roundwood throughput plus purchased chip throughput.
- (l) Based on 70% of total chip throughput.
- (m) Based on 30% of total chip throughput.
- (n) Fines separated from wood chip stream.
- (o) Total chips minus fines.
- (p) Assume 50% of chips transported by railcar and 50% by truck.
- (q) Assume 2% fines.
- (r) Bark burned in Nos. 3 and 4 Bark Boilers minus bark from roundwood.

Table B-8. 1997/1999 Baseline Emissions from Chemical Recovery Area at Stone Container, Panama City.

Regulated Pollutant	Emission Factor	Reference	Activity Factor	Annual Emissions (TPY)
<u>VOC</u>				
Black Liquor Oxidation Towers	0.34 lb C/ton ADUP	1	667,426 ton ADUP/yr (a)	113.5
Causticizers	0.044 lb C/ton CaO	4	140,485 ton CaO/yr (b)	3.1
Lime Mud Filters/Associated Equipment	0.0041 lb C/ton CaO	4	140,485 ton CaO/yr (b)	0.3
Black Liquor Tanks (2)	0.091 lb/tank/hr	2	8,760 hr/yr (d)	0.8
Black Liquor Oxidation Tank	0.1 lb/ton BLS	3	976,720 ton BLS/yr (c)	48.8
Green Liquor Clarifiers and Tanks	0.0014 lb C/ton CaO	4	140,485 ton CaO/yr (b)	<u>0.1</u>
			TOTAL VOC's	166.6
<u>Total Reduced Sulfur</u>				
Black Liquor Oxidation Towers	ND	1	--	--
Causticizers	ND	4	--	--
Lime Mud Filters/Associated Equipment	0.0005 lb /ton CaO	4	140,485 ton CaO/yr (b)	0.035
Black Liquor Tanks (2)	0.18 lb/tank/hr	2	8,760 hr/yr (d)	1.6
Black Liquor Oxidation Tank	0.0271 lb/ton BLS	3	976,720 ton BLS/yr (c)	13.2
Green Liquor Clarifiers and Tanks	7.01E-04 lb C/ton CaO	4	140,485 ton CaO/yr (b)	<u>0.049</u>
			TOTAL TRS	14.9

ND = Non-detectable

Footnotes

(a) 1997-1999 pulp production:

1999 = 668,850 ton ADUP

1997 = 666,002 ton ADUP

(b) 1997-1999 CaO production:

1999 = 143,735 tons CaO (10% impurities)

1997 = 168,454 tons CaO (10% Impurities)

(c) Based on 1997-1999 BLS processed:

1999: 970,509 tons burned

1997: 982,931 tons burned

(d) Two tanks operating 8,760 hr/yr.

References

1. Based on NCASI Technical Bulletin No. 646, pages 27 and 28.

2. Based on NCASI Technical Bulletin No. 701, pages 111-115 (Table 7).

3. Based on NCASI Technical Bulletin No. 701, pages 145-154 (Table 11).

4. Based on NCASI Technical Bulletin No. 701, pages 237-240 (Table 17).

Table B-9. 1997-1999 Baseline Emissions from Paper Making Area at Stone Container, Panama City.

Regulated Pollutant	Emission Factor	Reference	Activity Factor (a)	Annual Emissions (TPY)
VOC	0.60 lb C/ton ADUP	1	667,426 ton ADUP/yr	200.2
Total reduced sulfur	ND	1	--	--

Footnotes

- (a) 1997-1999 pulp production:
1999 = 668,850 ton ADUP
1997 = 606,445 ton ADUP

References

1. Based on NCASI Technical Bulletin No. 701, page 3 and Table 18.

Table B-10. 1997/1999 Baseline Emissions from No. 1 Smelt Dissolving Tank at Stone Container, Panama City.

Regulated Pollutant	Emission Factor	Reference	Activity Factor (a)	Annual Emissions (TPY)
Particulate (PM)	21.01 lb/hr	1	8,530 hr/yr	89.6
Particulate (PM10)	89.5 % of PM	2	--	80.2
Sulfur dioxide	0.016 lb/ton BLS	3	491,439 tons BLS/yr	3.93
Nitrogen oxides	0.033 lb/ton BLS	3	491,439 tons BLS/yr	8.11
Carbon monoxide	--	--	--	--
VOC	0.062 lb/ton BLS	3	491,439 tons BLS/yr	15.2
Sulfuric acid mist	5 % of SO2	5	--	0.24
Total reduced sulfur	0.65 lb/hr	1	8,530 hr/yr	2.77
Lead	1.7E-05 lb/ton BLS	4	491,439 tons BLS/yr	4.2E-03
Mercury	1.8E-07 lb/ton BLS	4	491,439 tons BLS/yr	4.4E-05
Beryllium	1.4E-07 lb/ton BLS	4	491,439 tons BLS/yr	3.4E-05
Fluorides	--	--	--	--

ton = 2000 lb.

note:

(a) BLS input rate based on 1997 and 1999 BLS burned in No. 1 Recovery Boiler:

1999: 487,000 tons burned

1997: 495,878 tons burned

References:

1. Based on the 1997 and 1999 compliance tests and operating data:

1999 = 22.2 lb PM/hr and 1.0 lbTRS/hr; for 8,544 hr/yr

1997 = 19.82 lb PM/hr and 0.8 lbTRS/hr; for 8,515 hr/yr

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. Five percent (5%) of SO2 becomes SO3, then take into account the ratio of sulfuric acid mist and gaseous sulfate molecular weights (98/80).

Table B-11. 1997-1999 Baseline Emissions from No. 2 Smelt Dissolving Tank at Stone Container, Panama City.

Regulated Pollutant	Emission Factor	Reference	Activity Factor (a)	Annual Emissions (TPY)
Particulate (PM)	22.9 lb/hr	1	8,488 hr/yr	97.0
Particulate (PM10)	89.5 % of PM	2	--	86.8
Sulfur dioxide	0.016 lb/ton BLS	3	485,281 tons BLS/yr	3.88
Nitrogen oxides	0.033 lb/ton BLS	3	485,281 tons BLS/yr	8.01
Carbon monoxide	--	--	--	--
VOC	0.062 lb/ton BLS	3	485,281 tons BLS/yr	15.04
Sulfuric acid mist	5 % of SO2	5	--	0.24
Total reduced sulfur	0.76 lb/hr	1	8,488 hr/yr	3.23
Lead	1.7E-05 lb/ton BLS	4	485,281 tons BLS/yr	4.1E-03
Mercury	1.8E-07 lb/ton BLS	4	485,281 tons BLS/yr	4.4E-05
Beryllium	1.4E-07 lb/ton BLS	4	485,281 tons BLS/yr	3.4E-05
Fluorides	--	--	--	--

ton = 2000 lb.

note:

(a) BLS input rate based on 1997-1999 BLS burned in No. 2 Recovery Boiler:

1999: 483,509 tons burned

1997: 487,053 tons burned

References:

1. Based on the 1997 and 1999 compliance tests and operating data:

1999 = 24.4 lb PM/hr and 0.86 lb TRS/hr; for 8,526 hr/yr

1997 = 21.3 lb PM/hr and 0.9 lb TRS/hr; for 8,449 hr/yr

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. Five percent (5%) of SO2 becomes SO3, then take into account the ratio of sulfuric acid mist and gaseous sulfate molecular weights (98/80).

Golder Associates Inc.

6241 NW 23rd Street, Suite 500
Gainesville, FL 32653-1500
Telephone (352) 336-5600
Fax (352) 336-6603

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SEP 07 1999



September 1, 1999

BUREAU OF AIR REGULATION

9937503-0100

Florida Department of Environmental Protection
Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

Attention: Mr. Rick Bradburn

Subject: Stone Container Corp. Panama City Mill
Cluster Rule Permit Application

Dear Mr. Bradburn:

As we discussed this week, Stone Container Corporation (SCC) is proposing a change to its Cluster Rule Compliance Project, for which an application was made to the Department in June 1999. Specifically, SCC is eliminating the oxygen delignification stage being proposed for the Bleach Plant. SCC was proposing the oxygen delignification stage prior to the bleaching stages within the Bleach Plant. This change will not affect other changes being proposed for the Bleach Plant or other changes being proposed at the Panama City mill, in order to comply with the cluster rule.

The elimination of the oxygen delignification stage eliminates the estimated emissions increase due to this processing step. These emissions were presented in Table 3-5 of the application. Emission estimates for the bleaching stages, presented in Tables 3-6 and 3-7, are not affected by this change, since to be conservative they did not account for the oxygen delignification process. On this basis, Table 3-15 has been revised. This table presented the estimated net change in emissions due to the proposed cluster rule project. As shown, eliminating the oxygen delignification stage reduces total project emissions of CO, TRS, VOC, and HAPs. A revised Table 3-15 is attached.

The steam requirements for the Cluster Rule Project have also changed due to the elimination of oxygen delignification, and since the new condensate steam stripper will no longer be integrated into the multiple effect evaporator system. The current steam balance indicates a net reduction in steam usage as a result of the cluster rule project.

Please call if you have any questions concerning this information. We stand ready to do everything necessary to obtain a draft permit within the next week or so.

Sincerely,

GOLDER ASSOCIATES INC.

A handwritten signature in cursive script that reads "David A. Buff".

David A. Buff, P.E.
Principal Engineer
Florida P.E. # 19011
SEAL

DB/jkk
Enclosure

cc: Bruce Mitchell, FDEP Tallahassee
David Riley
Charlie Ackel
Bill Heatley

Table 3-15. Summary of PSD Analysis, MACT I Compliance Project, Stone Container Corporation, Panama City (revised 9/2/99)

Source Description	Pollutant Emission Rate (TPY)							Sulfuric Acid Mist
	SO ₂	NO _x	CO	PM	TRS	VOC	HAP	
<u>FUTURE FACILITY WITH 3-YR MACT I MODIFICATIONS</u>								
I. Bleach Plant								
A. ClO ₂ Substitution			135.6		7.45	37.23	70.1	
B. Methanol Storage Tank						1.26	1.26	
<i>Sub-total Bleach System:</i>	0.00	0.00	135.60	0.00	7.45	38.49	71.36	0.00
II. Lime Kiln (a)								
A. Turpentine Storage Tank	0.016				0.000023	0.0026	0.0032	
B. New Foul Condensate Tank	0.016				0.000023	0.0026	0.0032	
<i>Sub-total LVHC System:</i>	0.032	0.00	0.00	0.00	0.000046	0.0052	0.0064	0.00
III. Condensate Stripper/Thermal Oxidizer	100.89	13.11	1.92	0.36	0.53	3.70	5.0	4.94
IV. Brown Stock Washing System	0.00	0.00	0.00	0.00	48.25	41.54	180.0	0.00
<i>Grand Total Proposed Modifications</i>	100.92	13.11	137.52	0.36	56.23	83.74	256.37	4.94
<u>EXISTING FACILITY</u>								
I. Bleach Plant								
A. ClO ₂ Substitution			119.98		4.75	73.55	61.44	
B. Methanol Storage Tank						0.85	0.85	
<i>Sub-total Bleach System:</i>	0.00	0.00	119.98	0.00	4.75	74.40	62.29	0.00
II. LVHC System								
A. No. 4 Power Boiler	238.79	0.00	0.00	0.00	0.53	0.00	0.00	12.0
III. Pulping Area General								
A. Turpentine Storage Tank	0.00	0.00	0.00	0.00	0.23	2.58	3.23	0.00
IV. Brown Stock Washing System	0.00	0.00	0.00	0.00	66.51	57.26	242.98	0.00
<i>Grand Total Existing Facility</i>	238.79	0.00	119.98	0.00	72.02	134.24	308.50	12.0
ESTIMATED PROJECT CHANGE	-138	13	18	0.4	-16	-51	-52	-7

(a) Represents increase in lime kiln emissions assuming TRS, HAP and VOC destruction efficiency of 99.9%.



Jeb Bush
Governor

Department of Environmental Protection

Northwest District
160 Governmental Center
Pensacola, Florida 32501-5794

August 17, 1999

RECEIVED
AUG 18 1999
BUREAU OF AIR REGULATION
David B. Struhs
Secretary

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

Dear Mr. Prescott:

This is to acknowledge receipt of your application, file number 0050009-005-AC, for a construction permit to increase the pulp production at the Panama City Mill. This letter constitutes notice that a permit will be required for your project pursuant to Chapter 403, Florida Statutes.

Your application is incomplete and evaluation of your proposed project will be delayed until the following information has been received.

- The application submitted does not provide the necessary information to the Department in determining PSD applicability pursuant to Rule 62-212.400, F.A.C., due to the requested relaxation of the PSD production rate/capacity of 668,850 TPY of ADUP from the digester system to 781,000 TPY ADUP. Since the limit in the production rate/capacity was developed in an air construction permit, the relaxation of this limit is considered a modification. Therefore, for the affected emissions units, please provide all reference material (i.e., test results), any assumptions, and the calculations for the current actual pollutant emissions (within the last five years in TPY) and the future allowable/potential pollutant emissions.
- In the air quality analysis, an unapproved EPA model was used. Please resubmit the analysis using an approved EPA model. This comment was forwarded by Bruce Mitchell at the Division of Air Resources Management in Tallahassee (850/488-1344). If you want information regarding appropriate models, please contact him or the EPA modelling section.

When referring to this project, please use the file number indicated above. If you have any questions, please contact Rick Bradburn at (850) 595-8364, extension 1233.

Sincerely,

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

EKM:rbc

cc: David A. Buff, P.E., Golder & Associates
Bruce Mitchell, DEP Division of Air Resources Management, Tallahassee

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