

Seminole Kraft Corporation

Jacksonville Mill

9469 Eastport Road
P.O. Box 26998
Jacksonville, Florida 32218-0998

November 6, 1991

904 751-6400

Mr. Clair Fancy, Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED

NOV 8 1991

Dear Mr. Fancy:

OERTEL, HOFFMAN,
FERNANDEZ & COLE, P.A.

In September you met with Stone Container representatives, Mr. Curt Barton and Mr. Terry Cole, concerning Seminole Kraft Corporation's request to burn recycled fiber rejects in the bark boilers. This request was for the period of time between the mill conversion to recycled fiber operation in the Summer/Fall 1992 and AES Compliance testing (Spring 1994). In a July 23, 1991 letter to Mr. Steve Smallwood, it was stated that the rejects would be less than 25% of the fuel and would not result in the increase of allowable emissions or heat input.

At the meeting you expressed three concerns: 1) Of the estimated 10% plastic content, how much is chlorinated plastic, 2) is there a danger of increased metals emissions from the estimated 15% inorganic portion, and 3) will there be a significant increase in VOC emissions. During the past month, we have initiated several projects to help address these concerns.

Quantity of Chlorinated Plastic

Stone Container's Missoula, Montana mill has a new recycled fiber plant which is similar in operation, reject removal and burning, and raw material feed to the one being constructed at Seminole Kraft. A typical 750 pound bale of recycled fiber was broken open and hand sorted for plastic material. While most of the plastic could not be identified as to original use, nearly all of it fell into one of two categories; strapping or bags. Further, the total 2 1/2 pounds of retrieved plastic (0.3% of the bale weight) was nearly equally divided between the two fractions. These two samples were sent to Galbraith Laboratories for chlorine analyses and the results are included in Appendix I.

The average chlorine content, 190 ppm, is low and is comparable with the chlorine content of bark, 153 ppm, (Appendix II). Total chlorine contribution from the plastic is 190 ppm CH x 0.3% plastic = 0.0001%.

Mr. Clair Fancy, Chief
November 4, 1991
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Inorganic Fraction of Recycle Rejects

Again, our Missoula, Montana operation was used to provide the necessary data. Samples of actual recycle fiber reject material was taken from the collection bin just prior to burning. The samples were ashed and the results (Appendix III) revealed that the inorganic portion was 1.43% which is much lower than the original estimate of 15% and, in fact, is lower than the inorganic fraction found in bark, 3.4%, (Appendix II). As a second check, a sample of recycle fiber rejects from Stone Container's Florence, South Carolina mill was also ashed. The inorganic portion was found to be 1.23% (Appendix IV) which agrees with the Missoula results. This low ash content is similar to carbonaceous fuels presently being burned in the bark boilers, and indicates there should be no increase in metal emissions resulting from burning recycle fiber rejects.

VOC Emissions

As you suggested at the September meeting, the best way of ascertaining that there will be no significant increase in VOC emission is to conduct a VOC stack test before and after the introduction of recycle fiber rejects to the bark boilers. Seminole Kraft agrees to conduct these tests.

Summary

In summary, our projects portray a burnable recycle fiber reject feed containing 98.3% fiber, 1.4% inorganic (sand, glass, etc.) and 0.3% plastic which contained only 190 ppm chlorine. We trust these data adequately answer your concerns and that we have demonstrated that this interim burning of recycle fiber rejects will have no environmental impact.

Sincerely,



Michael E. Riddle, Technical Director
Craig Hurd, Regional Environmental Manager

/pt

cc: L.A. Stanley
Terry Cole
Curt Barton



Stone Container Corporation

Missoula Mill

Mullan Road
P.O. Box 4707
Missoula, Montana 59806-4707

Containerboard and Paper Division

APPENDIX I

406 626-4451

Oct 2, 1991

Dear Mike:

Here it is. The plastic that was contained in a bale that weighed approximately 750 lb. Let me know what you find regarding percent PVC after your investigation is over.

Best Regards,
Jenny Brown

Separated	in two piles by Seminole	
<u>straps/tape</u>	<u>bags</u>	
412.2 grams	737.7 grams	total 1149.9 grams
		or 2.5 pound.

cc. Craig Hurd.

GALBRAITH

Laboratories, Inc.

QUANTITATIVE MICROANALYSES

ORGANIC - INORGANIC

PHONE 615/546-1335 FAX 615/546-7209

HARRY W. GALBRAITH, Ph.D.
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WILLIAM M. LONGMIRE
VICE-PRESIDENT
TECHNICAL SERVICES

Mr. Gene Doss
Seminole Kraft Corporation
9469 Eastport Road
Jacksonville, Florida 32218

October 21, 1991

Received: Oct. 16th
PO#: 11423

Dear Mr. Doss:

Analysis of your compound gave the following results:

Your #,	Our #,	ppm Chlorine,
A strap/tape	T-3677	270
B bags	T-3678	109

Sincerely yours,

GALBRAITH LABORATORIES, INC.

Gail R. Hutchens
Gail R. Hutchens
Exec. Vice-President

GRH:sla

APPENDIX II

Average of 7 attached bark tests.

Ash = 3.4%

Chlorine = 153 ppm



TECHNICAL SERVICES, INC.

ENVIRONMENTAL CONSULTANTS — INDUSTRIAL CHEMISTS

OFFICE 2471 SWAN ST. — P.O. BOX 52329

LABORATORIES 103-107 STOCKTON STREET

JACKSONVILLE, FLORIDA 32201

(904) 353-5761



Laboratory No. 82968

February 24, 1988

Sample of Bark

Date Received 02/16/88

For Seminole Kraft Corporation, P.O. Box 26998, Jacksonville, Florida 32218
Attention: Mr. Hodges

Marks: 02/16/88

CERTIFICATE OF ANALYSIS OR TESTS

		<u>Method</u>	<u>Date/Time</u>	<u>Analyst</u>
BTU/lb(Dry Basis)	6,971	ASTM D2015	02/17/88-1525	RK
Carbon(Dry Basis)	50.11 %			
Hydrogen (Dry Basis)	6.08 %			
Nitrogen (Dry Basis)	0.26 %			
Sulfur (Dry Basis)	0.012 %	ASTM D3177	02/18/88-0911	RK
Chloride (Dry Basis)	0.061 %	ASTM D808	02/18/88-1341	RK
Oxygen	41.67 %	By Difference		
Ash (Dry Basis)	1.804 %	ASTM D3174	02/17/88-1427	RK
Moisture (as received)	34.89 %	ASTM D3172	02/17/88-0912	RK

368 ppm as Chlorine
 calculated by M. Riddle 10/31/91
 Assume Chloride = NaCl
 Chlorine = 60.3% of chloride

Respectfully submitted,

TECHNICAL SERVICES, INC.

BY Henry C. Gray, Jr.

GALBRAITH

Laboratories, Inc.

QUANTITATIVE MICROANALYSES

ORGANIC — INORGANIC

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VICE-PRESIDENT
TECHNICAL SERVICES

Mr. G. Doss
Seminole Kraft Corporation
9469 Eastport Road
Jacksonville, Florida 32218

September 10, 1991

Received: August 28th
PO#: 10441

Dear Mr. Doss:

(Bark)

Analysis of your compound gave the following results:

Your #,	Our #,	Analyses,	
1	S-6602	As Received,	
		% Moisture	41.76
		% Ash	2.15
		Dry Basis,	
		% Carbon	51.13
		% Hydrogen	5.73
		% Kjeldahl Nitrogen	0.15
		ppm Sulfur	228
		ppm Chlorine	91
		% Ash	3.70
		% Oxygen (By Diff)	39.41
2	S-6603	As Received,	
		% Moisture	44.91
		% Ash	3.48
		Dry Basis,	
		% Carbon	46.61
		% Hydrogen	5.78
		% Kjeldahl Nitrogen	0.12
		ppm Sulfur	1247
		ppm Chlorine	336
		% Ash	6.31
		% Oxygen (By Diff)	41.14

Mr. Doss
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Your #,	Our #,	Analyses,	
3	S-6604	As Received,	
		% Moisture	40.99
		% Ash	1.28
		Dry Basis,	
		% Carbon	52.79
		% Hydrogen	5.72
		% Kjeldahl Nitrogen	0.19
		ppm Sulfur	272
		ppm Chlorine	97
		% Ash	2.17
		% Oxygen (By Diff)	39.28
4	S-6605	As Received,	
		% Moisture	40.16
		% Ash	1.96
		Dry Basis,	
		% Carbon	51.96
		% Hydrogen	5.65
		% Kjeldahl Nitrogen	0.15
		ppm Sulfur	245
		ppm Chlorine	80
		% Ash	3.27
		% Oxygen (By Diff)	39.09
5	S-6606	As Received,	
		% Moisture	63.15
		% Ash	1.69
		Dry Basis,	
		% Carbon	51.05
		% Hydrogen	5.50
		% Kjeldahl Nitrogen	0.27
		ppm Sulfur	663
		ppm Chlorine	79
		% Ash	4.58
		% Oxygen (By Diff)	38.80

Mr. Doss
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Your #,	Our #,	Analyses,	
6	S-6607	As Received,	
		% Moisture	57.49
		% Ash	0.87
		Dry Basis,	
		% Carbon	51.84
		% Hydrogen	5.59
		% Kjeldahl Nitrogen	0.34
		ppm Sulfur	348
		ppm Chlorine	19
		% Ash	2.04
		% Oxygen (By Diff)	40.49

Sincerely yours,

GALBRAITH LABORATORIES, INC.

Gail R. Hutchens/dse

Gail R. Hutchens
Exec. Vice-President

GRH:dse



Stone Container Corporation

Missoula Mill

APPENDIX III

Mullan Road

P.O. Box 4707

Missoula, Montana 59806-4707

Containerboard and Paper Division

October 30, 1991

406 626-4451

Craig Hurd
Regional Manager
Environmental Services
Stone Container Corporation
Technology and Environmental Center
2150 Parklake Drive, Suite 400
Atlanta, GA 30345

Dear Craig,

As you requested, I had a sample of our burnable wastes tested for ash content. The averaged ash content was 1.43%.

A representative sample of our burnable OCC rejects was collected from the central collection bin. These rejects are a combination of rejects from: 1) the hydrapurge/selectpurge system, 2) the Wandel vibration screens (rejects from the coarse screens) and 3) the hydradenser (rejects from the tertiary slotted screen and waxes and stickies from the Krofta clarifier). I have included a print out of the basic scheme of the Missoula OCC plant from the Honeywell computer controls for reference.

This sample was divided into three parts and dried for 24 hours and weighed on a bone dry basis. The samples were then brought gradually up to approximately 575 degrees Centigrade in our muffle furnace and burned at that temperature for approximately three hours. The samples were then cooled for about one hour in a desiccator and weighed. The weights, in grams, are recorded below along with the calculated inorganic fraction of the sample in percent.

	<u>Bone Dry</u>	<u>Ash</u>	<u>%Ash</u>
Sample 1	1.7913	0.0237	1.323
Sample 2	0.8943	0.0133	1.487
Sample 3	0.9651	0.0152	1.606
Average:	1.2169	0.0174	1.430 (using the average weights.)

If you have any questions, please let me know.

Sincerely,

Jenny Brown
Quality Control Engineer

APPENDIX IV

A representative sample off recycle fiber rejects from the Stone Container mill in Florence, South Carolina was dried and then ashed in a muffle furnace at 600°C.

Bone Dry Weight:

58.5604		53.6512
- <u>53.5902</u> (crucible)		- <u>53.5902</u>
4.9702 grams		0.0610
0.0610/4.9702	=	0.0123
	=	1.23% Ash

October 22, 1991
Gene Doss