



Fernandina Beach Containerboard Mill
 North 8th Street
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 Fernandina Beach, FL 32035
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VIA FEDEX
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October 15, 2007

RECEIVED
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 BUREAU OF AIR REGULATION

Mr. Jeffrey Koerner
 Administrator, Permitting North Section
 Bureau of Air Regulations
 Florida Department of Environmental Protection
 Bob Martinez Section
 2600 Blair Stone Road, MS #5505
 Tallahassee, Florida 32399-2400

**Re: Proposal for BART SO₂ Reduction for No. 5 Power Boiler
 Project No. 0890003-018-AC, BART Application Addendum
 Smurfit-Stone Container Enterprises, Inc., Fernandina Beach Mill**

Dear Mr. Koerner:

On September 26, 2007, we met with Bruce Mitchell, Trina Vielhauer, Tom Rogers, and Larry George at your office to discuss the BART permitting process. As a result of that discussion, we are now proposing that the Fernandina Beach Mill (the mill) adopt a daily sulfur dioxide (SO₂) emission limit for the No. 5 Power Boiler as an addendum to our BART Determination Permit Application. This proposal can be viewed as an exemption option or a BART control strategy.

Proposed and Actual SO₂ Emissions from No. 5 Power Boiler

In the original BART Determination Permit Application submitted to your office on January 31, 2007, the maximum 24-hour SO₂ emission rate for the No. 5 Power Boiler was 1,026.4 lbs/hr (Table 2-3). This emission rate was based on the highest daily average emission rate during years 2001 through 2003. As shown in Table 3-5 of the January 31 submittal, the 8th highest visibility impact due to the No. 5 Power Boiler alone is 0.637 dv, which is approximately 88% of the total facility impact. Of this impact, 75-90% of the total visibility impacts are due to sulfate particles, originating from SO₂ and sulfuric acid mist emissions. Clearly, the most effective strategy for visibility impact reduction is to decrease the daily maximum SO₂ emissions from No. 5 Power Boiler.

To reduce the total visibility impacts of all BART eligible sources to less than 0.5 dv, the mill proposes a daily maximum 24 hr SO₂ emission rate of 6.6 tons/day. Attached is a revised Table 3-5 describing visibility impacts to Okefenokee with the new proposed daily SO₂ limit of 6.6 tons/day. This daily rate equates to an average hourly SO₂ emission rate of 550 lbs/hr. This new emission rate limit of 6.6 tons/day is a very large emission reduction from permitted and actual daily maximum emissions. For example, on March 5, 2001, the daily actual maximum SO₂ emission rate was 12.6 tons/day. From 12.6 tons/day to 6.6 tons/day is a daily emissions reduction of 52%.

No. 5 Power Boiler SO ₂ Emissions								
	Proposed Daily Emission Rate (t/d)	Current Permitted Emission Limit	2006 Maximum Actual Emissions*	2005 Maximum Actual Emissions*	2004 Maximum Actual Emissions*	2003 Maximum Actual Emissions*	2002 Maximum Actual Emissions*	2001 Maximum Actual Emissions*
Tons/year	2,409.0 [^]	6,618.6	622.8	501.9	565.4	405.4	257.1	642.4
Tons/day	6.6	20.8	11.5	7.9	9.5	10.1	10.2	12.6
Lbs/hr	550.0	1,733.7	958.3	658.3	791.7	841.7	850.0	1050.0

*From Annual Air Operating Reports, [^]Assumes 365 days per year of operation, actual is approximately 350 days

Proposal for BART SO₂ Reduction for No. 5 Power Boiler

No. 5 Power Boiler's future projected annual emissions are not expected to increase; however, this is irrelevant because the annual emissions are not considered in the modeled visibility impacts to nearby Class I areas. Visibility impacts are calculated on a 24-hr average emission rate.

To achieve and monitor the proposed new SO₂ emission rate of 6.6 tons/day, the mill will manage daily oil consumption and install a SO₂ Continuous Emissions Monitoring System (CEMS). The projected costs of installing and maintaining a new CEMS are included in amended Table 1, attached. This proposal provides a much more cost-effective method of achieving the same visibility improvements as the other more costly options we have reviewed.

As suggested by EPA for selecting the "Best" BART control technology alternative, the following must be evaluated:

1. Expected emission rate
2. Emissions performance level (e.g. percent pollutant removed or emissions reduction)
3. Expected emissions reductions
4. Costs of compliance including total annualized costs (\$), cost effectiveness (\$/ton), and incremental cost effectiveness (\$/ton), and any other cost effectiveness measures such as \$/dv reduction.
5. Energy impacts
6. Non-air quality environmental impacts; and
7. Modeled visibility impacts.

As demonstrated in the BART permit application and supporting documentation, including this letter, the reduced daily maximum SO₂ emission limit is the best BART control technology alternative for minor visibility improvements. We still contend that neither this proposal nor any other proposal to reduce emissions from the mill will significantly improve visibility conditions at nearby Class I areas, let alone be measurable.

As requested in the September 26 meeting, FDEP also agreed to provide a working draft of the BART permit for review as soon as it becomes available.

Please contact me at (904) 277-7718 or by Email at rgdavis@smurfit.com if you need any additional information.

Sincerely,



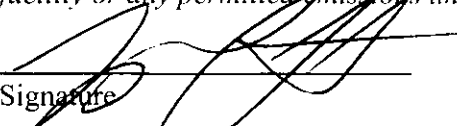
Rachel G. Davis
Environmental Engineer

Enclosures

FACILITY INFORMATION

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name :	
George Q. Langstaff, Vice-President, Regional Mill Operations	
2. Application Responsible Official Mailing Address...	
Organization/Firm: Smurfit-Stone Container Enterprises, Inc.	
Street Address: North 8th Street	
City: Fernandina Beach State: FL Zip Code: 32034	
3. Application Responsible Official Telephone Numbers...	
Telephone: (904) 261-5551 ext. Fax: (904) 277-5888	
4. Application Responsible Official Email Address: glangsta@smurfit.com	
5. Owner/Authorized Representative Statement:	
<p><i>I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.</i></p>	
 Signature	<u>10/15/07</u> Date

FACILITY INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: David A. Buff Registration Number: 19011
2. Professional Engineer Mailing Address... Organization/Firm: Golder Associates Inc.** Street Address: 6241 NW 23rd Street, Suite 500 City: Gainesville State: FL Zip Code: 32653
3. Professional Engineer Telephone Numbers... Telephone: (352) 336-5600 ext. 545 Fax: (352) 336-6603
4. Professional Engineer Email Address: dbuff@golder.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/> if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/> if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/> if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i> <i>David A. Buff</i> _____ Signature _____ Date (seal)

* Attach any exception to certification statement.

** Board of Professional Engineers Certificate of Authorization #00001670

TABLE 3-5 (Revised 10/12/07)
CONTRIBUTION OF VISIBILITY IMPAIRING PARTICLE SPECIES
NEW IMPROVE ALGORITHM
SMURFIT-STONE CONTAINER ENTERPRISES, INC., FERNANDINA MILL

Emission Unit	Unit ID	8 th Highest Impact and Contribution by Species											
		2001				2002				2003			
		Impact (dv)	Contribution (%) ^a			Impact (dv)	Contribution (%) ^a			Impact (dv)	Contribution (%) ^a		
			SO ₄	NO ₃	PM ₁₀		SO ₄	NO ₃	PM ₁₀		SO ₄	NO ₃	PM ₁₀
<i>New IMPROVE Algorithm</i>													
<u>Okefenokee NWA</u>													
No. 5 Power Boiler	PB5	0.364	79.8	9.3	7.5	0.327	86.8	1.3	4.9	0.403	75.9	17.1	3.1
No. 4 Recovery Boiler	RB4	0.078	48.7	39.9	11.4	0.079	77.2	4.7	18.0	0.102	37.3	48.5	14.2
No. 4 Smelt Dissolving Tank	SDT4	0.018	31.3	2.1	66.6	0.018	31.3	2.1	66.6	0.022	23.7	3.4	72.9
Total BART-Eligible Source		0.440	87.6	1.8	3.4	0.412	65.7	2.4	22.4	0.495	68.9	21.5	4.3

^a Sulfate (SO₄) particles are formed due to SO₂ and H₂SO₄ emissions; nitrate (NO₃) particles are formed due to NO_x emissions, and other non-hygroscopic PM₁₀ particles are a result of fine filterable PM₁₀, coarse filterable PM₁₀, elemental carbon, and condensable secondary organic aerosol emissions.

TABLE 1 (Revised 10/12/07)
COST EFFECTIVENESS OF FUEL SWITCHING FOR No. 5 POWER BOILER

Cost Items	Cost Factors	No. 2 Oil	No. 2 Oil	No. 6 Oil	CEMS
		(0.0015% S)	(0.05% S)	(1.0% S)	
		Cost (\$)	Cost (\$)	Cost (\$)	Cost (\$)
DIRECT CAPITAL COSTS (DCC)					
(1) Equipment Cost					
(a) New Fuel Oil Storage tank	See Footnote "a"	807,000	807,000	807,000	0
(b) Pumps, piping, etc	See Footnote "a"	800,000	800,000	1,200,000	0
(c) New oil guns/atomizer sprayer plates	Babcock & Wilcox - excludes installation ^b	175,000	175,000	0	0
(d) CEMS unit	Analyzer and monitor equipment - includes installation (SSCE estimate)	0	0	0	200,000
(2) Sales Tax	Florida Sales Tax - 6.25% of Equipment Cost	111,375	111,375	125,438	12,500
Subtotal: Total Equipment Cost (TEC)		1,893,375	1,893,375	2,132,438	212,500
(3) Direct Installation Costs	85% of TEC (for new oil guns)	148,750	148,750	0	Included Above
Total DCC:		2,042,125	2,042,125	2,132,438	212,500
INDIRECT CAPITAL COSTS (ICC)^c					
(1) Indirect Installation Costs	SSCE estimate	430,000	430,000	640,000	
(a) Engineering	10% of TEC (for new oil guns), \$42/hr and 343 hrs (for CEMS) ^f	17,500	17,500	Included Above	14,406
(b) Construction & Field Expenses	10% of TEC (for new oil guns), \$25/hr and 168 hrs (for CEMS) ^f	17,500	17,500	Included Above	4,200
(c) Construction/CEMS Contractor Fee	10% of TEC (for new oil guns), \$89/hr and 110 hrs (for CEMS) ^f	17,500	17,500	Included Above	9,790
(d) Contingencies	3% of TEC (for new oil guns)	5,250	5,250	Included Above	--
(2) Other Indirect Costs					
(a) Startup	1% of TEC (for new oil guns)	1,750	1,750	Included Above	--
(b) Performance Test	3% of TEC (for new oil guns), ACE estimate	5,250	5,250	Included Above	10,000
(c) Quality Assurance Calibration Evaluation	\$53/hr and 91 hrs (for CEMS) ^f	--	--	--	4,823
Total ICC:		494,750	494,750	640,000	43,219
TOTAL CAPITAL INVESTMENT (TCI):	DCC + ICC	2,536,875	2,536,875	2,772,438	255,719
DIRECT OPERATING COSTS (DOC)^d					
(1) Operating Labor					
Operator	1.0 hr/shift, \$30/hr, 8760 hrs/yr; \$25/hr and 390 hrs (for CEMS) ^f	32,850	32,850	32,850	9,750
Supervisor	15% of operator cost, \$42/hr and 44 hrs (for CEMS) ^f	4,928	4,928	4,928	1,848
CEMS Consultant	\$89/hr and 2 hrs (for CEMS) ^f	--	--	--	178
Test Crew	\$53/hr and 77 hrs (for CEMS) ^f	--	--	--	4,081
(2) Maintenance					
Labor	Equivalent to One-Half Operating Labor	16,425	16,425	16,425	Included Above
Materials	100% of maintenance labor	16,425	16,425	16,425	0
(3) Utilities		--	--	--	--
(4) Fuels					
Existing Fuel Cost (2.5% S)	\$0.94/gal, 3.4 MMgal/yr	--	--	--	--
Proposed Fuel Cost (Lower S Content)	See Footnote "e"	--	--	--	--
Differential Fuel Cost (Proposed - Existing)	See Footnote "e"	3,302,250	3,219,000	235,571	--
Total DOC:		3,372,878	3,289,628	306,199	15,857
INDIRECT OPERATING COSTS (IOC)^d					
(1) Overhead	60% of oper. labor & maintenance	42,377	42,377	42,377	9,514
(2) Property Taxes	1% of total capital investment	25,369	25,369	27,724	2,557
(3) Insurance	1% of total capital investment	25,369	25,369	27,724	2,557
(4) Administration	2% of total capital investment	50,738	50,738	55,449	5,114
Total IOC:		143,852	143,852	153,274	19,743
CAPITAL RECOVERY COSTS (CRC)					
	CRF of 0.0944 times TCI (20 yrs @ 7%)	239,481	239,481	261,718	--
	CRF of 0.1424 times TCI (10 yrs @ 7%)	--	--	--	36,414
ANNUALIZED COSTS (AC):	DOC + IOC + CRF	3,756,210	3,672,960	721,191	72,014
BASELINE SO₂ EMISSIONS (TPY)					
	Highest emissions in last 5 years	623.0	623.0	623.0	--
MAX SO₂ EMISSIONS WITH PROPOSED FUEL (TPY)					
	3.7 MMgal/yr No. 2 Oil or 3.4 MMgal/yr 1% No. 6 Fuel Oil	0.4	13.3	248.0	--
REDUCTION IN SO₂ EMISSIONS (TPY)					
		622.6	609.7	375.0	--
COST EFFECTIVENESS:					
	\$ per ton of SO ₂ Removed	6,033	6,024	1,923	--
BASELINE VISIBILITY IMPACT (dv)					
	Table 3-5 of 1/2007 BART Control Analysis	0.637	0.637	0.637	0.637
CONTROLLED VISIBILITY IMPACT (dv)					
		0.123	0.134	0.298	0.403
REDUCTION IN VISIBILITY IMPACT (dv):					
	Baseline - Controlled	0.514	0.503	0.339	0.234
COST EFFECTIVENESS OF VISIBILITY REDUCTION (\$/dv):					
	AC/Reduction in visibility	7,307,802	7,302,107	2,127,407	307,754

Footnotes:

^a Based on SSCE data for 500,000 for a storage tank, and estimated cost of piping, pumps, etc

^b Based on quote of \$175,000 additional equipment cost for new atomizers for use of low sulfur No. 2 fuel oil

^c All indirect capital costs are included in basic price.

^d Factors and cost estimates reflect OAQPS Cost Manual, Section 5

^e Increase in fuel cost associated with buying different type of oil - 3.4 MMgal/yr No. 6 oil with 1% S or 3.7 MMgal/yr No. 2 oil with 0.05% S or 0.0015% S

Per Colonial Oil Industries, Inc., increases in cost compared to the current price paid for 2.5% S oil are - \$36.54/barrel for 0.05% S oil, \$57.49/barrel for 0.0015% S oil, and \$2.91/barrel for 1% S residual oil

^f Factors and cost estimates reflect OAQPS Cost Manual, Section 2.

Handwritten notes:
40,000 (CA)
if 0.87/S
//0.87, 3/51