#### Golder Associates Inc.

6241 NW 23rd Street, Suite 500 Gainesville, FL USA 32653 Telephone (352) 336-5600 Fax (352) 336-6603 www.golder.com



June 11, 2007

063-7645

Florida Department of Environmental Protection Bureau of Air Regulation Northwest District 2600 Blair Stone Road Tallahassee, Florida 32399 RECEIVED

JUN 13 2007

BUREAU OF AIR REGULATION

Attention: Jeffery F. Koerner, P.E., Air Permitting North

RE: SMURFIT-STONE CONTAINER ENTERPRISES, INC.

PROJECT NO. 0050009-028-AC (PSD-FL-388)

PETCOKE FIRING IN LIME KILN

2<sup>nd</sup> REQUEST FOR ADDITIONAL INFORMATION

Dear Mr. Koerner:

Smurfit-Stone Container Enterprises, Inc. (SSCE) and Golder Associates Inc. (Golder) have received the Florida Department of Environmental Protection (FDEP) request for additional information (RAI) dated May 11, 2007, regarding the proposed firing of petroleum coke (petcoke) in the Lime Kiln at the Panama City Mill. Each of FDEP's requests is answered below, in the same order as they appear in the RAI letter. Note that the RAI indicated the project as project No. 0590005-028-AC. We believe this should instead be project No. 0050009-028-AC.

#### NO, Controls and Emissions

Comment 1. Please account for BACT as combustion control for firing natural gas and distillate oil as stand alone fuels.

Response: In the prevention of significant deterioration (PSD) application, SSCE proposed a best available control technology (BACT) limit for nitrogen oxides (NO<sub>x</sub>) of 185 parts per million by volume dry (ppmvd) at 10 percent oxygen (O<sub>2</sub>) when firing the maximum amount of petcoke. This limit actually represents an 80 percent petcoke, 20 percent No. 6 fuel oil mixture, and was based on the burner manufacturer's estimated maximum emission rate for this scenario. The equivalent maximum emissions are 107.8 pounds per hour (lb/hr) and 472.3 tons per year (TPY).

We have had Coen review its emission estimates and confirm the estimates for all four combinations of fuels: petcoke/No. 6 fuel oil; petcoke/natural gas; No. 6 fuel oil only; and natural gas only. The refined estimates are presented in the attached email from Coen. The Coen estimates are based on a number of assumptions, so we are hesitant to accept these as permit limits. Therefore, we propose to add a 10 percent safety factor to Coen's estimates. In addition, Coen has provided emission factors in terms of lb/MMBtu, which is more accurate than specifying a concentration level, which is dependent

on exhaust gas flow, oxygen level, etc. Therefore, SSCE is proposing NO<sub>x</sub> limits in terms of lb/MMBtu.

The proposed limits are shown in the attached Table 1. As shown, the maximum emission rate of 0.57 lb/MMBtu equates to an hourly mass emission rate of 103.0 lb/hr, which is lower than the previously proposed 107.8 lb/hr. The basis of the BACT limits is the same as for petcoke/No. 6 fuel oil presented in the application, i.e., low-NO<sub>x</sub> burner, good combustion practices, efficient operation, and preventative maintenance on the Lime Kiln. In addition, BACT for natural gas would include use of a low-nitrogen fuel. SSCE may at times burn only No. 6 fuel oil, or only natural gas, based upon availability of petcoke, fuel prices, etc.

Revised application form pages are attached which reflect the proposed limits.

## Comment 2. Please describe the combustion control methods and monitoring that will be used to comply with the BACT standard.

**Response:** Combustion control methods: the process requires a kiln hot end temperature of between 2,400 and 2,500 degrees Fahrenheit (°F), and control of the combustion air to attain an excess O<sub>2</sub> level of between 2 percent and 4 percent at the kiln discharge end. This promotes proper calcination of the lime mud, while optimizing complete combustion of the fuel. A low-NO<sub>x</sub> burner will be installed.

## Comment 3. The Department is considering requiring a continuous emissions monitoring system (CEMS) to measure and record NO<sub>x</sub> emissions. Please comment.

**Response:** Although a low- $NO_x$  burner will be installed,  $NO_x$  is not a controllable parameter. Due to operational constraints, the Lime Kiln must be operated within specific limits on temperature and excess oxygen. The burner is of a staged combustion design and represents the current state of the art in low- $NO_x$  burners. Requiring a CEMS for a parameter that cannot be controlled by the operator would not be of real value. Perhaps a test program upon startup which would test emissions over the range of fuels would provide sufficient data for  $NO_x$ .

#### SO2 Controls and Emissions

## Comment 4. Please account for BACT as combustion control for firing natural gas and distillate oil as stand alone fuels.

Response: It is understood that FDEP meant to refer to residual oil instead of distillate oil in this comment. The proposed BACT for sulfur dioxide (SO<sub>2</sub>) when firing natural gas is good combustion practices (GCP), optimal mud washing, and flue gas desulfurization, the same as for firing of No. 6 fuel oil or natural gas. When firing natural gas, there is minimal sulfur input to the Lime Kiln due to the fuel. All sulfur input to the system comes from the lime mud input to the kiln as well as from non-condensable gases (NCGs) burned in the Lime Kiln. Since it has been demonstrated by testing that SO<sub>2</sub> emissions from the Lime Kiln are already very low (range of 0.5 to 5.6 lb/hr) when firing No. 6 fuel oil (2.4 percent sulfur), firing of natural gas may not result in measurably lower SO<sub>2</sub> emissions. Therefore, the proposed BACT for natural gas firing is 0.40 pound per ton (lb/ton) of calcium oxide (CaO) produced, based on the highest test data for SO<sub>2</sub>. This is equivalent to 7.3 lb/hr at the maximum production rate of 18.35 tons per hour (TPH) CaO.

## Comment 5. Please describe the monitoring procedures and levels for the venturi scrubber to control SO<sub>2</sub> emissions.

Response: SSCE would propose the same scrubber parameters contained in the current Title V permit (0050009-025-AV) for the Lime Kiln. These scrubber parameters are intended to ensure efficient scrubbing action in order to control particulate matter (PM) emissions to meet Title 40, Part 63 of the Code of Federal Regulations (40 CFR 63), Subpart MM, National Emission Standards for Hazardous Air Pollutants (NESHAPs) requirements. PM is the same substance (lime product) that would ensure adequate pH is maintained in the scrubber water for SO<sub>2</sub> control. The minimum scrubber parameters contained in the current Title V permit are as follows (all as 3-hour averages):

Bull nozzle (center flow) flow rate: 455 gallons per minute (gpm)

Tangential nozzle flow rate: 493 gpm

Scrubber pressure differential: 18 inches water

These setpoints are verified at each stack test scrubber. The pH on the scrubber is normally about 9 due to the collection of lime dust from the process. The amount of lime dust buildup in the scrubber is controlled by monitoring and controlling the scrubber lime/water density.

Comment 6. The emissions stack test data from October 31, 2002, indicate a mean emissions rate of 0.39 lb/ton, while the data from February 28, 2006, indicate a mean emissions rate of less than 0.034 lb/ton. The application proposes a 32.9 lb/hr SO<sub>2</sub> emission limit as BACT or 1.79 lb/ton CaO (dry basis). Justify the higher determination.

Response: The higher determination is based on the increased sulfur loading entering the Lime Kiln. Using No. 6 fuel oil, the sulfur loading to the Lime Kiln due to just the fuel is approximately 230 lb/hr. Using the same assumptions for SO<sub>2</sub> removal used in the application for the petcoke (80 percent inherent removal in the Lime Kiln; 90 percent removal in the scrubber), the SO<sub>2</sub> emissions due to fuel combustion would be 9 lb/hr. This is in close agreement to the measured SO<sub>2</sub> emission rate of 5.6 lb/hr during one of the two SO<sub>2</sub> emission tests on the Lime Kiln. Using petcoke as a fuel, the sulfur input to the system due to fuel only is much higher: 823 lb/hr. Using the same assumptions on SO<sub>2</sub> removal, the controlled emission rate is 32.9 lb/hr. Until actual test data become available on petcoke burning, the SO<sub>2</sub> removal assumptions are reasonable.

Comment 7. In response to our comment 9, SSCE provided revised permit conditions for Combination Boilers No. 3 and 4. On page 1-3 of the PSD permit application, SSCE proposes a lower limit of 690 lb/hr, 24-hour average for the No. 4 Combination Boiler. This value was not included in the revised permit condition for this source. Will there be a period of time when the Lime Kiln will be burning petcoke and the enclosure of the Recovery Boilers will not have been completed? If this is the case, the SO<sub>2</sub> impacts from this case should be addressed.

**Response:** FDEP is correct, the 690 lb/hr should have been included in the revised permit condition for the No. 4 Combination Boiler, as follows:

C.5. <u>Sulfur Dioxide</u>. Sulfur dioxide emissions shall not exceed 1,183 lb/hr when incinerating NCG and stripper-off gas (SOG), 1,174 lb/hr when burning SOG but not

NCG, 1,183 lb/hr when burning NCG but not SOG, and 772 lb/hr when not incinerating NCG or SOG. Sulfur dioxide emissions shall be continuously monitored and recorded. The permittee shall maintain a scrubber pH of 8.0 or greater (24-hour average) during times when the continuous monitor is being repaired and/or calibrated. Monitoring records shall be maintain and available for inspection by FDEP.

- a. Beginning on the date that the permittee completes the enclosure of the east wall of the Recovery Boilers building, the sulfur dioxide emission from the No. 4 Combination Boiler shall not exceed 690 lb/hr, 24-hour average, and the combined total sulfur dioxide emissions from the Nos. 3 and 4 Combination boilers shall not exceed 1,350 pounds per hour based on a 24-hour average.
- b. Beginning on the date that the permittee completes the enclosure of the east wall and one or more additional walls of the Recovery Boilers building, the sulfur dioxide emissions from the No. 4 Combination Boiler shall not exceed 690 lb/hr, 24-hour average, and the combined total sulfur dioxide emissions from the Nos. 3 and 4 Combination boilers shall not exceed 1,100 pounds per hour based on a 24-hour average.
- c. The permittee shall provide notification to the Department within 7 days of completion of activities authorized in condition C.5.a and C.5.b above.

Based on the current construction schedules, the Lime Kiln petcoke project is scheduled to become operational by December 2007. The enclosure of the east wall of the Recovery Boilers building is scheduled to be completed prior to burning petcoke in the Lime Kiln, while the remainder of the enclosure is scheduled to also be completed by December 2007. Thus, there will be no period of time when the Lime Kiln will be burning petcoke and the Recovery Boilers building enclosure will not have been completed.

Also attached is the Professional Engineer certification statement. Thank you for consideration of this information. If you have any questions, please do not hesitate to call me at (352) 336-5600.

Sincerely,

GOLDER ASSOCIATES INC.

David A. Buff, P.E., Q.E.P.

Principal Engineer

DB/kjp

**Enclosures** 

Cc: T. Clements

Y:\Projects\2006\0637645 SSCE Panama City PSD\4.1\RAI 0507\RAI053007-645.doc

#### APPLICATION INFORMATION

<u>Pr</u>	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 N.W. 23rd Street, Suite 500				
	City: Gainesville State: Florida 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, the undersigned, hereby certify, except as particularly noted herein*, that:				
	(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				
	(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.				
	(3) If the purpose of this application is to obtain a Title V air operation permit (check here , 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.				
	<ul> <li>(4) If the purpose of this application is to obtain an air construction permit (check here ∑, 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 ☐, 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.</li> <li>(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 ☐, 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.</li> </ul>				
	Signature Date				
	• •				
	(seal)				

<sup>\*</sup> Attach any exception to certification statement.
\*\* Board of Professional Engineers Certificate of Authorization #00001670

TABLE 1 SSCE PANAMA CITY LIME KILN  $\mathrm{NO_x}$  EMISSIONS

(6-11-07)

Fuel Scenario	Coen - NO <sub>x</sub> Concentration at 10% O <sub>2</sub> <sup>1</sup>	Coen - NO <sub>x</sub> Emissions (lb/MMBtu) <sup>1</sup>	Proposed Limit <sup>2</sup> (lb/MMBtu)	Equivalent NO <sub>x</sub> <sup>3</sup> lb/hr
Petcoke/No. 6 oil	165 ppm	0.50	0.55	99.0
Petcoke/gas	171 ppm	0.52	0.57	103.0
100% gas	74 ppm	0.20	0.22	39.6
100% No. 6 oil	101 ppm	0.30	$0.38^{4}$	68.4

<sup>&</sup>lt;sup>1</sup> Updated by Coen in email dated 6/6/07.

<sup>&</sup>lt;sup>2</sup> Coen estimate times a safety factor of 10 percent.

<sup>&</sup>lt;sup>3</sup> Based on equivalent lb/MMBtu factor and maximum heat input of 180 MMBtu/hr.

<sup>&</sup>lt;sup>4</sup> Based on maximum NO<sub>x</sub> emission rate measured during Feb 7, 2006, stack testing. Coen predicts no increase over current Lime Kiln emissions.

#### Buff, Dave

From:

KBLee@coen.com

Sent:

Wednesday, June 06, 2007 9:03 PM

To:

Buff, Dave

Cc:

Thomas, Laura; Clements, Tom; Knight, Kevin; BWadhwani@coen.com;

RSantos@coen.com; WSchulze@coen.com

Subject:

RE: Panama City Coen Burner

Attachments: Lime Kiln NOx Comparison 5-31-07.xls

Mr. Dave Buff,

I apologize for the delayed response in a time of urgency. There needed to be several discussions done internally between myself, applications, and staff engineering to confirm the estimated NOx emissions for the SSCE Panama City Kiln burners (Coen File 50D-15278-1).

We are listing the following numbers to eliminate all discrepancies listed in the spreadsheet attached. Numbers below assumes certain criteria, including but not limited to:

- pet, coke analysis given in email dated 5/25/07 by Tom Clements
- 0.3 wt% Fuel Bound Nitrogen in #6 oil
- firing rate at 100% capacity
- petcoke/fuel split at 80/20%
- specific primary & pet. coke conveying air flows for optimal burner performance
- hot end temperatures of about 1,800 degrees F.

Please note once again, this is for emissions related to burner contribution only (<u>NOT stack emissions/O2 readings</u>) and that changes in any of the above assumption can result in varying degrees of effects on the expected burner NOx emission (i.e. changing the volume of pet.coke conveying air flow).

Petcoke/No.6 Oil

.5 LB/MMBtu

165 PPM @ 10% O2

Petcoke/Gas

.52 LB/MMBtu

171 PPM @ 10% O2

100% Gas

.2 LB/MMBtu

74 PPM @ 10% O2

100% No.6 Oil

.30 LB/MMBtu

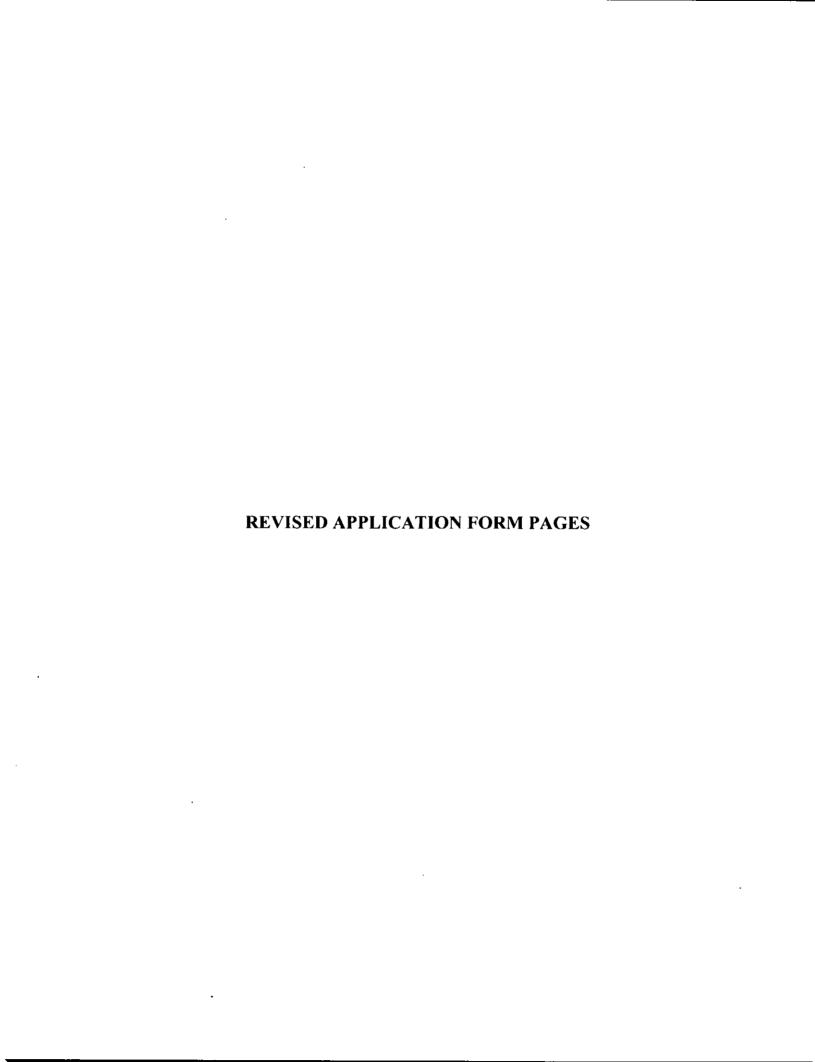
101 PPM @ 10% O2

Hopefully, this will help with your permit process and with moving forward on the project. I will be happy to discuss this issue further over a conference call. If possible, I'd like to suggest Monday, June 11 at 1PM ET (10AM PT) when I will be available in the office. Please confirm if this is feasible.

Thank you for your kind attention.

Regards, King Lee Project Manager Engineering - Project Management Coen Company, Inc. 100 Foster City Blvd. Foster City, California 94404 USA

Tel: 1 (650) 638-0365 Fax: 1 (650) 638-0355 Direct: 1 (650) 686-3217



# EMISSIONS UNIT INFORMATION Section [1] Lime Kiln/NCG Collection

POLLUTANT DETAIL INFORMATION
Page [6] of [11]
Nitrogen Oxides – NO<sub>x</sub>

## F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

#### **Potential/Estimated Fugitive Emissions**

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: NO.	2. Total Percent Efficiency of Control:				
3. Potential Emissions:	4. Synthetically Limited?  1 tons/year ☐ Yes ☒ No				
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):				
6. Emission Factor: 0.57 lb/MMBtu  Reference: Quote by COEN (6/6/07)			7. Emissions Method Code: 5		
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:				
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years				
10. Calculation of Emissions:  Hourly: 0.57 lb/MMBtu x 180 MMBtu/hr = 103 lb/hr  Annual: 103 lb/hr NO <sub>x</sub> x 8,760 hr/yr x 1 ton/2,000 lb = 451 TPY					
11. Potential Fugitive and Actual Emissions Comment:  Potential emissions based on a quote by COEN (June 6, 2007) that estimated NO <sub>x</sub> at 0.57 lb/MMBtu for a mixture of 80 percent petcoke and 20 percent natural gas.					

DEP Form No. 62-210.900(1) – Form Effective: 02/02/06

# POLLUTANT DETAIL INFORMATION Page [6] of [11] Nitrogen Oxides – NO<sub>x</sub>

# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

#### Allowable Emissions 1 of 4

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date Emissions:	e of Allowable
3.	Allowable Emissions and Units: 0.57 lb/MMBtu	4.	Equivalent Allowabl 103 lb/hour	e Emissions: 451 tons/year
5.	5. Method of Compliance: EPA Method 7E			
6.	Allowable Emissions Comment (Description Limit reflects petcoke/natural gas burning.	of (	perating Method):	

#### Allowable Emissions Allowable Emissions 2 of 4

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date Emissions:	e of Allowable
3.	Allowable Emissions and Units: 0.55 lb/MMBtu	4.	Equivalent Allowable 99 lb/hour	e Emissions: 434 tons/year
5.	Method of Compliance: EPA Method 7E	•		
Allowable Emissions Comment (Description of Operating Method):     Limit reflects petcoke/No. 6 fuel oil firing.				

#### Allowable Emissions 3 of 4

1. Basis for OTHER	Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:	
3. Allowabl 0.22 lb/N	Emissions and Units: MBtu	4. Equivalent Allowable Emissions: 40 lb/hour 173 tons/year	
5. Method o	f Compliance: hod 7E		
Allowable Emissions Comment (Description of Operating Method):     Limit reflects 100 percent natural gas burning.			

DEP Form No. 62-210.900(1) – Form Effective: 02/02/06

# EMISSIONS UNIT INFORMATION Section [1] Lime Kiln/NCG Collection

# POLLUTANT DETAIL INFORMATION Page [6] of [11] Nitrogen Oxides – NO<sub>x</sub>

# F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 4 of 4

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:			
3.	Allowable Emissions and Units: 0.38 lb/MMBtu	4.	Equivalent Allowable Emissions: 68.4 lb/hour 300 tons/year			
5.	Method of Compliance: EPA Method 7E	·				
6.	<ol> <li>Allowable Emissions Comment (Description of Operating Method):</li> <li>Limit reflects 100 percent No. 6 fuel oil burning.</li> </ol>					
Ali	lowable Emissions Allowable Emissions	0	f			
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:			
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions:  lb/hour tons/year			
5.	Method of Compliance:					
6.	Allowable Emissions Comment (Description	of (	Operating Method):			
Allowable Emissions Allowable Emissions of						
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:			
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year			
5.	Method of Compliance:					
6.	Allowable Emissions Comment (Description	of (	Operating Method):			

DEP Form No. 62-210.900(1) – Form Effective: 02/02/06

From:

Harvey, Mary

Sent:

Tuesday, May 15, 2007 9:39 AM

To:

Koerner, Jeff; Arif, Syed; Sheplak, Scott; Cascio, Tom; Linero, Alvaro; Mitchell, Bruce;

Thomas, Bruce X.; Heron, Teresa; Holtom, Jonathan

Cc:

Adams, Patty

Subject:

FW: Letter - B.G. Sammons-Smurfit-Stone Container Enterprises, Inc. - Facility ID #0590005-

028-AC

Attachments: LTR.Smurfit-Stone Container - Facility #0590005-028-AC.pdf

Good Morning All!

I hope that I didn't omit anyone - but please read below. I think that I email this before - but I may not have - but anyway this is the third email that I have received from Kathy about her name not being added to the mailing list. Can you please help me with this?

Thanks a million, Mary

----Original Message-----

From: Forney.Kathleen@epamail.epa.gov [mailto:Forney.Kathleen@epamail.epa.gov]

Sent: Tuesday, May 15, 2007 8:53 AM

To: Harvey, Mary

Subject: Fw: Letter - B.G. Sammons-Smurfit-Stone Container Enterprises, Inc. -

Facility ID #0590005-028-AC

#### Hey Mary,

We received the email, but it would be helpful if you added me to the email list.

### Thanks,

#### Katy

Katy R. Forney

Air Permits Section EPA - Region 4 61 Forsyth St., SW Atlanta, GA 30024

Phone: 404-562-9130 Fax: 404-562-9019

---- Forwarded by Kathleen Forney/R4/USEPA/US on 05/15/2007 08:51 AM

----

---- Forwarded by James Little/R4/USEPA/US on 05/15/2007 08:33 AM ----

---- Forwarded by Gregg Worley/R4/USEPA/US on 05/14/2007 09:14 AM -----

"Harvey, Mary" <Mary.Harvey@dep .state.fl.us>

05/11/2007 02:43 PM То

<bgsammons@smurfit.com>,
<tmclemen@smurfit.com>, "Mr.
David Buff, P.E., Golder
Associates, Inc."
<dbuff@golder.com>, "Bradburn,
Rick"
<Rick.Bradburn@dep.state.fl.us>,
Gregg Worley/R4/USEPA/US@EPA,
"Mr. Dee Morse, National Park
Service" <dee\_morse@nps.gov>

CC

"Thomas, Bruce X."

<Bruce.X.Thomas@dep.state.fl.us>,

"Koerner, Jeff"

<Jeff.Koerner@dep.state.fl.us>,

"Adams, Patty"

<Patty.Adams@dep.state.fl.us>,

"Gibson, Victoria"

<Victoria.Gibson@dep.state.fl.us>,

"Holtom, Jonathan"

<Jonathan.Holtom@dep.state.fl.us>
Subject

Letter - B.G. Sammons-Smurfit-Stone Container Enterprises, Inc. - Facility ID #0590005-028-AC

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

The Bureau of Air Regulation is issuing electronic documents for

permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,
DEP, Bureau of Air Regulation
(See attached file: LTR.Smurfit-Stone Container - Facility #0590005-028-AC.pdf)

From:

Harvey, Mary

Sent:

Monday, May 14, 2007 11:36 AM

To:

Adams, Patty

Subject:

FW: Letter - B.G. Sammons-Smurfit-Stone Container Enterprises, Inc. - Facility ID #

0590005-028-AC

----Original Message----

From: Dee Morse@nps.gov [mailto:Dee Morse@nps.gov]

Sent: Monday, May 14, 2007 11:33 AM

To: Harvey, Mary

Subject: Letter - B.G. Sammons-Smurfit-Stone Container Enterprises, Inc. - Facility ID #

0590005-028-AC

Return Receipt

Letter - B.G. Sammons-Smurfit-Stone Container Enterprises,

document: Inc. - Facility ID #0590005-028-AC

was

Dee Morse/DENVER/NPS

received

by:

at:

05/14/2007 09:33:19 AM

From:

Harvey, Mary

Sent:

Monday, May 14, 2007 9:10 AM

To:

Adams, Patty

Subject:

FW: Letter - B.G. Sammons-Smurfit-Stone Container Enterprises, Inc. - Facility ID #

0590005-028-AC

From: Bradburn, Rick

Sent: Friday, May 11, 2007 3:20 PM

To: Harvey, Mary

Subject: Read: Letter - B.G. Sammons-Smurfit-Stone Container Enterprises, Inc. - Facility ID #0590005-028-AC

#### Your message

To:

'bgsammons@smurfit.com'; 'tmclemen@smurfit.com'; 'Mr. David Buff, P.E., Golder Associates, Inc.'; Bradburn, Rick; 'Mr. Gregq

Worley, EPA Region 4'; 'Mr. Dee Morse, National Park Service'

Cc:

Thomas, Bruce X.; Koerner, Jeff; Adams, Patty; Gibson, Victoria; Holtom, Jonathan

Subject:

Letter - B.G. Sammons-Smurfit-Stone Container Enterprises, Inc. - Facility ID #0590005-028-AC

Sent:

5/11/2007 2:44 PM

was read on 5/11/2007 3:20 PM.

From:

Harvey, Mary

Sent:

Monday, May 14, 2007 9:10 AM

To:

Adams, Patty

Subject:

FW: Letter - B.G. Sammons-Smurfit-Stone Container Enterprises, Inc. - Facility ID #

0590005-028-AC

From: Sammons, Bob [mailto:BSAMMONS@SMURFIT.COM]

Sent: Saturday, May 12, 2007 10:57 AM

To: undisclosed-recipients

Subject: Read: Letter - B.G. Sammons-Smurfit-Stone Container Enterprises, Inc. - Facility ID #0590005-028-AC

Your message

To: BSAMMONS@SMURFIT.COM

Subject:

was read on 5/12/2007 10:57 AM.

From:

Harvey, Mary

Sent: To: Friday, May 11, 2007 2:54 PM Thomas, Bruce X.; Adams, Patty

Subject:

FW: Letter - B.G. Sammons-Smurfit-Stone Container Enterprises, Inc. - Facility ID #

0590005-028-AC

Bruce it was delivered.

Thanks, mary

From: System Administrator

Sent: Friday, May 11, 2007 2:53 PM

To: Harvey, Mary

Subject: Delivered:FW: Letter - B.G. Sammons-Smurfit-Stone Container Enterprises, Inc. - Facility ID

+ACM-0590005-028-AC

Your message

To: <u>bsammons@smurfit.com</u>

Subject: FW: Letter - B.G. Sammons-Smurfit-Stone Container Enterprises, Inc. - Facility ID #0590005-028-AC

Sent: 5/11/2007 2:52 PM

was delivered to the following recipient(s):

Sammons, Bob on 5/11/2007 2:53 PM

From:

Harvey, Mary

Sent:

Friday, May 11, 2007 2:44 PM

To:

'bgsammons@smurfit.com'; 'tmclemen@smurfit.com'; 'Mr. David Buff, P.E., Golder

Associates, Inc.'; Bradburn, Rick; 'Mr. Gregg Worley, EPA Region 4'; 'Mr. Dee Morse, National

Park Service'

Cc:

Thomas, Bruce X.; Koerner, Jeff; Adams, Patty; Gibson, Victoria; Holtom, Jonathan

Subject:

Letter - B.G. Sammons-Smurfit-Stone Container Enterprises, Inc. - Facility ID #0590005-028-

AC

Attachments: LTR.Smurfit-Stone Container - Facility #0590005-028-AC.pdf

#### Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <a href="http://www.adobe.com/products/acrobat/readstep.html">http://www.adobe.com/products/acrobat/readstep.html</a>.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation



### Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

May 11, 2007

#### ELECTRONIC MAIL - RECEIVED RECEIPT REQUESTED

B. G. Sammons, General Manager Smurfit-Stone Container Enterprises, Inc One Everitt Avenue Panama City, Florida 32402

Re: Request for Additional Information

Project No. 0590005-028-AC (PSD-FL-388)

Petcoke Firing in Lime Kiln

#### Dear Mr. Sammons:

On February 23, 2007, the Department received your application and sufficient fee for an air construction permit to allow petcoke firing in the lime kiln at the Smurfit-Stone Panama City Mill. On April 12, 2007, the Department received a response to a request for additional information that was sent on March 23, 2007. The application is incomplete. In order to continue processing your application, the Department will need the additional information requested below. Should your response to any of the items below require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

#### NOx Controls and Emissions

- 1. Please account for BACT as combustion control for firing natural gas and distillate oil as stand alone fuels.
- 2. Please describe the combustion control methods and monitoring that will be used to comply with the BACT standard.
- 3. The Department is considering requiring a continuous emissions monitoring system (CEMS) to measure and record NO<sub>x</sub> emissions. Please comment,

#### SO2 Controls and Emissions

- 4. Please account for BACT as combustion control for firing natural gas and distillate oil as stand alone fuels.
- 5. Please describe the monitoring procedures and levels for the venture scrubber to control SO<sub>2</sub> emissions.
- 6. The emissions stack test data from October 31, 2002, indicate a mean emissions rate of 0.39 lb/ton, while the data from February 28, 2006, indicate a mean emissions rate of less than 0.034 lb/ton. The application proposes a 32.9 lb/hr SO<sub>2</sub> emission limit as BACT or 1.79 lb/ton CaO (dry basis). Justify the higher determination.

#### Air Quality Modeling Analysis

7. In the response to our comment 9, SSCE provided revised permit conditions for Combination Boilers No. 3 and No. 4. On page 1-3 of the PSD permit application, SSCE proposes a lower limit of 690 lb/hr, 24-hour average for the Combination Boiler No. 4. This value was not included in the revised permit condition for this source. Will there be a period of time where the Lime Kiln will be burning petcoke and the enclosure of the Recovery Boilers will not have been completed? If this is the case, the SO2 impacts from this case should be addressed.

The Department will resume processing your application after receipt of the requested information. Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. For any material changes to the application, please include a new certification statement by the authorized representative or responsible official. You are reminded that Rule 62-4.055(1), F.A.C. requires applicants to respond to requests for information within 90 days or provide a written request for an additional period of time to submit the information.

If you have any questions regarding this matter, please call Bruce Thomas at 850/921-7744 or me at 850/921-9536.

Sincerely,

for Jeff Koemer, P.E.

BAR - Air Permitting North

cc: Mr. B. G. Sammons, Smurfit-Stone (bgsammons@smurfit.com)

Mr. Tom Clements, Smurfit-Stone (tmclemen@smurfit.com)

Mr. David Buff, Golder Associates (dbuff@golder.com)

Mr. Rick Bradburn, NWD Office (rick.bradburn@dep.state.fl.us)

Mr. Gregg Worley, EPA Region 4 (worley.gregg@epa.gov)

Dee Morse, NPS (dee morse@nps.gov)