



Smurfit-Stone
Container Corporation
Panama City Mill
1 Everitt Ave.
Panama City, FL 32401
850-785-4311
850-763-8530 fax

Jeff

January 22, 2008

Ms. Trina Vielhauer
Chief, Bureau of Air Regulations
Florida Dept. of Environmental Protection
2600 Blair Stone Rd, MS #5505
Tallahassee, FL, 32399-2400

RECEIVED

JAN 28 2008

BUREAU OF AIR REGULATION

Re: Smurfit-Stone Panama City Mill
Permit To Burn Pet Coke To Displace Fuel Oil
Permit No.: PSD-FL-388

Dear Ms. Vielhauer

The purpose of this letter is to request that the Department reconsider a permit requirement that the mill install a stack gas flow meter and continuously monitor the stack flow on the lime kiln at our paper mill. This requirement is in the recently issued permit allowing the kiln to burn pet coke to displace fuel oil that it would otherwise burn (Project No. 005-0009-028-AC, EU #004).

The reasons for our objection to this meter are discussed in the attached memo previously provided to FDEP. This memo details why we feel that this monitor is unproven technology and as such, should not be required as part of a compliance demonstration. As your staff can confirm, neither we nor they nor NCASI have been able to locate a single wet scrubber pulp and paper kiln equipped to monitor the stack gas flow.

Once you have had a chance to review the issue, the mill would like to meet with you and your staff in order to reach a resolution prior the required installation date.

If you have any questions or wish any additional information, please contact Tom Clements, our Mill Environmental Manager, at (850) 785-4311 x470.

We look forward to hearing from you.

Sincerely

Bobby G. Sammons
Bobby G. Sammons
General Manager.



Smurfit-Stone
Container Corporation
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Panama City, FL 32401
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October 31, 2007

Mr. Bruce Thomas
Division of Air Resource Mgmt
Florida Dept. of Environmental Protection
2600 Blair Stone Rd, MS #5505
Tallahassee, FL, 32399-2400

RECEIVED

JAN 23 2008

BUREAU OF AIR REGULATION

Re: Smurfit-Stone Panama City Petcoke Permit
Permit No: PSD-FL-388
Project: No: 0050009-028-AC

Dear Mr. Thomas

We have discussed our concerns about a requirement to use a CEMS as the compliance method for a lbs/hr NOx limit in the permit that allows us to burn petcoke as a substitute for fuel oil in our existing lime kiln. In addition to a NOx CEMS, which measures ppm of NOx, this would require the installation and operation of a device that can accurately, reliably, and continuously measure the gas flow out of the kiln. As you requested, this memo summarizes our research into the feasibility of installing a flow monitor on our wet scrubber-equipped kiln, as well as other related issues. As you may recall, we objected to this permit condition in our reply to your second request for additional information and during the permit comment period. Based on our study, we offer the following for your consideration:

1. Baseline NOx Emissions

The baseline NOx emissions were obtained by stack testing using Method 7E. As further supported below, we believe that compliance with the lb/hr NOx limit in the permit should be determined by the same method.

2. A NOx CEMS readout in pounds per hour has not been required for any other "non-ESP" equipped kiln.

The mill has contacted industry representatives and done an internet search. We have located seven other recently issued Lime Kiln Petcoke firing permits. They are:

- Bowater – Coosa Pines, AL
- Georgia Pacific – Monticello, MS
- Leaf River – New Augusta, MS
- Georgia Pacific – Port Hudson, LA
- SSCC – Hodge, LA
- Wycliffe Paper – Wycliffe, KY
- Brunswick Cellulose – Brunswick, GA



Of these seven, four are located in EPA region IV, and six did not have a NO_x CEMS requirement at all. Compliance with the NO_x emissions limit was based on EPA Method 7 or 7E. The only one that did have a NO_x CEMS requirement was Brunswick Cellulose. This is a new (2006) kiln, equipped with an ESP followed by a wet scrubber. The flow measurement point appears to be the discharge of the ESP, before entering the wet scrubber.

In addition, Georgia-Pacific in Palatka, Florida was recently (May 29, 2007) issued a PSD permit by FDEP for repairs on its No. 4 Lime Kiln (PSD-FL-380). NO_x emissions were subject to BACT, but no NO_x CEMS was required and compliance was demonstrated by EPA Method 7E.

3. We have been unable to locate a similar kiln equipped with a stack gas flow rate monitor and have not found a flow monitor that has been proven or seems likely to operate effectively on our kiln.

During our discussions, the general consensus was that the flow meter with the best chance of success was an ultrasonic flow meter. We contacted NCASI and they were not aware of a similar kiln that was equipped with one. We contacted Teledyne Industries, who is the leading manufacturer of ultrasonic flow meters. While they “feel” that their meter would work, they had no similar installations and were not willing to provide a meaningful performance guarantee for the monitor passing the RATA. They would only guarantee to refund the cost of the monitor itself if it were returned and this guarantee was then conditioned on the use of methods 2G and 2H for the RATA flow measurement.

Teledyne did provide a contact in the cement industry that used their meters. We contacted them and the cement kilns in question were equipped with an ESP. They felt that the Teledyne meter worked well, but that it was critical to stabilize the kiln operation and felt that it was necessary to develop a calibration curve by conducting RATA at various kiln loading levels. When asked if they might anticipate any difficulty in applying this meter on a kiln supplied with a scrubber, they indicated that keeping the meter face clean could present a problem due to the scale buildup in the stack downstream of the scrubber.

In summary, although Teledyne has been successful in the cement industry on ESP equipped kilns, there are significant differences between their kilns and ours, including:

1. An ESP equipped kiln provides an easier environment to measure gas flow. From the ESP equipped kiln, the gases are much hotter (400° vs. 170°F) and the gas stream is not saturated, eliminating water droplet interferences. Furthermore, scale buildup on surfaces inside the stack are minimal when compared to a kiln scrubber application where keeping the face of the ultrasonic clean may be difficult (see Picture).



2. Cement kilns (and, but to a far lesser extent, brand new Kraft mill kilns) operate at a much more consistent throughput. Cement kilns are operated at a constant feed rate of crushed limestone, which does not vary in moisture. In the case of a Kraft mill lime kiln, calcium carbonate slurry is dewatered in a precoat filter, and the density of that dewatered slurry can vary considerably as the filter plugs between filter backwashing. The pre-coat filter introduces variability not experienced with crushed limestone feed to a cement kiln as the filter cake also varies in moisture due to changes in particle size, changes in feed density, time between filter backwashes, and other variables. A Kraft mill kiln operating rate must also be changed regularly to adjust with changing pulp production.

We are not contending that a NO_x CEMS reporting ppm is technically infeasible and have accepted the NO_x ppm limit in the permit, with the CEMS as the designated compliance method, although such a CEMS requirement has not been imposed on other lime kilns firing petcoke (except for Brunswick, which, as described above, is a new kiln equipped with an ESP before its wet scrubber) or other kilns in Florida. We are also willing to accept the lb/hr NO_x limit if compliance with this limit is based on an annual stack tests using EPA Method 7E. This is the normal method of compliance for all emission limits where a CEMS is not employed. It is also the method of compliance stated in the BACT Determinations contained in Appendix E of the permit. Requiring compliance with the lb/hr limit based on the CEMS would necessitate the use of a flow monitor, which we believe is not technically feasible and would not provide accurate and reliable results.

In conclusion we believe that use of a CEMS as the compliance method for a lbs/hr limit on the kiln is unproven and technically infeasible and that changing the compliance method for determining the lbs/hour of NO_x to stack testing would be consistent with the original draft permit – which specified stack testing as the compliance method in Appendix E – and would constitute at most a minor amendment.

We appreciate your willingness to consider our concerns. Please call me at (850) 785-4311x470 if you have additional questions or wish any more information.

Sincerely

T.L. Clements

Tom Clements
Environmental Mgr.

Shared/envdata/petcoke/FDEP kiln flow meter 10-31-07(3)

