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KA 624-08-04
June 8, 2009



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RECEIVED

JUN 1 2009

BUREAU OF AIR REGULATION

Ms. Susan Devore
Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Road, MS # 5500
Tallahassee, Florida 32399-2400

SUBJECT: Partial Response to Request for Additional Information (RAI) dated March 20, 2009
Suwannee American Cement – Branford, Suwannee County
DEP File No. 1210465-016-AC (PSD-FL-259G)
Alternative Fuel Materials Testing – SAC Cement Kiln
P.E. Certification

Dear Ms. Devore:

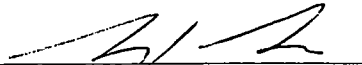
This letter provides the RAI response information to Item #2 requested by your letter to Tom Messer of Suwannee American Cement dated March 20, 2009 regarding the subject permit application.

Regarding the RAI response information to Item #1, we are requesting additional time to respond. As you are aware by discussions via phone and email, we continue to gather information to address the concerns of the Department on this item and therefore request an additional 90 days per Rule 62-213.420(1)(b)5.c., F.A.C. We request that the Department provide us a response on this item separate from the response to Item #2.

In accordance with Rule 62-4.050(3), I have sealed this letter with enclosure as certification by a professional engineer. Enclosed please find four (4) copies of this RAI response. I trust this response addresses the information of your request and appreciate your expedited review.

Please feel free to contact me at (352) 377-5822 or mlee@kooglerassociates.com if you have any questions regarding this submittal.

Sincerely,



Max Lee, Ph.D., P.E.

6/8/09

Date:

P.E. Seal: 58091

Cc: via email

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Krishna Cole, SAC: krishnac@suwanneecement.com

Enclosure: 4 copies-AC Permit Application Response to RAI #4, Item 2

2. ***For any trial of autofluff, it will be necessary to monitor the mercury emissions from the kiln. Please provide cost estimates for the use and analysis of mercury sorbent traps and the use of a continuous emissions monitoring system to measure and record mercury emissions. The cost estimates should consider appropriate monitoring for each of the various requested operating scenarios (autofluff/coal and raw mill on, autofluff/coal and raw mill off, autofluff/coal/fly ash and raw mill on, autofluff/coal/fly ash and raw mill off, etc.) for the duration of the trial***

The estimate of costs for determining Hg emissions is provided below.

SAC will not inject fly ash into the calciner during ASR test trials, as proposed in the February 18, 2009 letter, item 3. Therefore, the testing scenarios tabulated below do not include testing for combinations with fly ash injection.

The methods proposed to determine pollutant emissions that are not continuously monitored were provided in our February 18, 2009 response letter, page 19 of 20 and are repeated below:

Stack Testing:
Dioxin & Furans (Method 23)
HCl (Method 26)
PM/PM10 (Method 5)
Metals (Method 29)
SAM (Method 8)
CO (Method 10)

It should be noted that Method 29 was proposed as a method to gather data of the following metals of concern, cadmium (Cd), lead (Pb), Mercury (Hg), and Thallium (Tl). This method was proposed to address the concerns of the Department per the December 10, 2008 letter, item 6:

*Pursuant to the discussion in Question Number 5 above, as part of this alternative fuel testing project, is SAC considering pursuing the bleeding of filter dust to ensure that metals such **lead, cadmium and thallium** from the ASR is incorporated into the clinker and do not exit via the kiln stack? Additionally, bleeding of filter dust during this project would also allow the effect of dust bleeding on mercury emissions to be explored.*

The request for information on use of continuous monitoring of Hg by sorbent traps or CEMs and stack testing by Method 29 is provided below. SAC expects that evaluation of ASR to last for approximately 90 days and therefore the costs of a temporary CEMs is based on a 90-day period. Such monitoring is an additional testing requirement to the proposed metals testing by Method 29.

The quality assurance of any temporary Hg CEMs is assumed to only require daily zero/span calibration and not Relative Accuracy Test Audit procedures.

Stack Testing -metals (Method 29)

ASR/Coal, RM off, \$9,500

ASR/Coal, RM on, \$9,500

TOTAL: \$19,000

Additional monitoring: 90 days Continuous Monitor - Hg CEMs

TOTAL (range of costs): - \$88,000 to \$247,000

Additional monitoring: 90 days Continuous Monitor - sorbent traps (Method 30B)

weekly change of traps + calibration

TOTAL: \$94,000

SAC believes that this test trial air construction permit does not constitute the need for continuous Hg monitoring. SAC has proposed that the Hg content of ASR will be accurately assessed by material balance and assumed to be emitted. A Hg CEMs will provide insight into the release mechanism and resulting temporal behavior of Hg emissions. However, such information is not required to demonstrate compliance to the permitted limit of mercury. Furthermore, if the goal of continuous monitoring of Hg is to reveal the typical continuous Hg emissions of a cement plant, the influence of ASR, if any, would not be representative of typical Hg emissions. In the context of this permitting process for a temporary test trial, the need for continuous Hg monitoring is not warranted.