



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blairstone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor
Jeff Kottkamp
Lt. Governor
Michael W. Sole
Secretary

December 10, 2008

Electronically sent – Received Receipt requested.

tomm@suwanneecement.com

Mr. Tom Messer, Plant Manager
Suwannee American Cement (SAC)
Post Office Box 410
Branford, Florida 32008

Re: DEP File No. 1210465-016-AC (PSD-FL-259G)
Alternative Fuel Materials Testing – SAC Cement Kiln
Branford, Suwannee County

Dear Mr. Messer:

On November 10, 2008, the Department of Environmental Protection (Department) received your response electronically to our request for additional information (RAI) that was dated October 29, 2008.

As previously indicated, the main concern of the Department involves the constituents (metals) of automobile shredder residue (ASR) and their ultimate fate in the kiln system, i.e., are the metals incorporated into the clinker or are they emitted to the air through the kiln stack. After review of your response to the Departments' RAI and Pursuant to Rules 62-4.055, and 62-4.070 F.A.C., Permit Processing, the Department requests submittal of the additional information indicated below to address concerns with regard to ASR prior to processing the application.

Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application forms. Some of the questions are related to your meeting with the Departments' Tallahassee staff at SAC on December 5, 2008.

1. Please provide more specific details regarding the quality control plan that will be used at automobile shredder facilities (ASF) which are not located at SAC to ensure that metals like mercury and lead are removed from ASR prior to shipment to SAC. Specifically, provide detailed quality control procedures to ensure that metals are removed from the ASR prior to shipment to SAC. The Department may include such procedures in a construction permit to make such procedures a condition of testing and any future operation.
2. Please provide information on how SAC will ensure that the quality control plan mentioned in item No. 1 above will be followed since the ASF is not located at SAC and is not owned or under the control of SAC. Please provide any agreements or understandings that have been reached with any ASF that will provide ASR to SAC.
3. Please provide the detail testing protocols as per are discussion on Friday December 5th to show the ultimate fate of metals in the kiln system when burning ASR. Specifically, provide the protocols to

show whether the ultimate fate of the metals is incorporation into the clinker or as air emissions from the kiln stack.

4. In the material that SAC submitted in response to the Departments' RAI dated October 29, 2008, it was indicated that ASR had or was being used as an alternative fuel source at the Holcim cement plant in Michigan and the TXI cement plant in Texas. However, based on the Departments' review of the submitted material it was determined that ASR had not and was not being used at either facility as a fuel source. Consequently, please provide any information on other cement kilns in the U.S. or abroad that have in the past or that are currently using ASR as an alternative fuel source. If available, the information should include any constituents testing of the ASR such as metal content, stack emissions testing, and metal material balances that were done while burning ASR.
5. SAC indicated in Table 5 of Slide 23 of the presentation given during the meeting with Department staff on December 5th that testing by VDZ indicates that the fate of metals other than mercury in raw materials and fuel sources in modern preheater kiln systems is incorporation into the clinker. However this testing was conducted on kiln system where they likely have the ability to bleed filter dust to cement production (for example the case of the thallium) and consequently any metal buildup cycle that may occur in the kiln system may be disrupted by bleeding the filter dust. Please explain how SAC infers that the VDZ test results are applicable to modern preheater kiln systems in North America where bleeding filter dust is not available.
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.

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. Please note that per Rule 62-4.055(1): "*The applicant shall have ninety days after the Department mails a timely request for additional information to submit that information to the Department..... Failure of an applicant to provide the timely requested information by the applicable date shall result in denial of the application.*"

If you have any questions regarding this matter, please contact David Read at 850-414-7268.

Sincerely,



Trina Vielhauer, Bureau Chief
Bureau of Air Regulation
Division of Air Resource Management

TV/dr

Cc: Joe Horton, SAC: jbhorton@suwanneecement.com
Greg Strong, DEP NED: greg.strong@dep.state.fl.us
Chris Kirts, DEP NED: christopher.kirts@dep.state.fl.us
Max Lee, Ph.D. P.E., K&A: mlee@kooglerassociates.com
Kathy Forney, EPA Region 4: forney.kathleen@epa.gov
Heather Abrams, EPA Region 4: abrams.heather@epa.gov