



North Carolina Department of Environment and Natural Resources
Division of Air Quality

Michael F. Easley, Governor

William G. Ross, Jr., Secretary
B. Keith Overcash, P.E., Director

October 21, 2008

Mr. James S. Willis
Corporate Environmental Manager
Titan America
6071 Catawba Road
Troutville, Virginia 24175

Subject: PSD Permit Application
Application Update
Carolinas Cement Company, LLC
Castle Hayne, North Carolina
New Hanover County
Facility ID: 6500296

Dear Mr. Willis:

This letter is written as a follow-up to the meeting conducted on October 13, 2008 between Titan America and the Division of Air Quality (DAQ) that was held in the DAQ Raleigh Central Office. Modeling issues identified in that meeting will be addressed under separate cover. In this meeting you stated that Titan America/Carolinas Cement Company, LLC had analyzed the raw material at the site and discovered that the sulfur content was actually higher than the estimated amount used in the initial application. This increase in sulfur content in the raw materials would produce a higher sulfur dioxide emission rate. Please address the following questions and concerns.

- In the initial application on page 31 of the BACT analysis for sulfur dioxide, and on page 1 of 36 in the cost analysis, it was stated that the mill off conditions would be approximately 10% of the time. In the October 13, 2008 meeting, a 20% reference was made to the mill off conditions. It also, appears that a 10% mill off condition was used in the worse case modeling scenario.
- Please use allowable emissions in the model for the NAAQS evaluation for sulfur dioxide, particulate matter, and PM10.
- Please use actual emissions to evaluate sulfur dioxide, particulate matter, and PM10 for the increment analysis.
- Since the surrounding facilities do not have nitrogen dioxide allowable emission limits, use prorated actual emissions for NOx (actual emission x 8760).
- Provide a summary table that lists the worse case emissions for the mill off condition, the mill on condition, and the worse case emission rate scenario that were modeled.

If you have any questions or concerns, please contact Booker T. Pullen at (919) 715-6248 or booker.pullen@ncmail.net.

Sincerely,

Donald R. van der Vaart, Ph.D., P.E.,
Chief, Permitting Section

c: Central files
Wilmington Regional Office

Permitting Section

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