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VIA E-MAIL (keith.overcash@ncdenr.gov)
ORIGINAL VIA U.S. MAIL

B. Keith Overcash, P.E., Director
North Carolina Division of Air Quality
1641 Mail Service Center
Raleigh, North Carolina 27699

RE: Comments Related to:
Draft Air Quality Permit No. 07300R08
Facility ID: 6500296
Carolinacement Cement Company LLC
Castle Hayne, New Hanover County, North Carolina

Dear Mr. Overcash:

This letter incorporates comments made by Carolinacement Cement Company LLC (CCC) during the recent Public Hearings on October 20, 2009 and addresses comments recently made by EPA Region 4 in a letter to the DAQ dated October 26, 2009.

CCC Public Hearing Comments

We believe that it is important for the public to understand the rigorous regulatory and technical review our application went through, the significant changes the DAQ did make, and that taken in whole the resulting permit will be one of the most protective of air quality for any cement plant in the U.S. The DAQ was extremely thorough in their technical review. The Best Achievable Control Technology (BACT) analysis went through no fewer than four iterations incorporating evaluations of new and existing technologies, with variations on several technologies. The resulting final determination on BACT by the DAQ incorporates what is currently most technologically feasible, realistically cost effective, and protective of air quality. Modeling that was conducted also went through multiple revisions, incorporating more conservative parameters, climate data sets, and emissions data from other sources. All of which ensured with a very high degree of conservatism that air quality standards will not be exceeded.

The DAQ must work within the boundaries of what is in the current regulations, and has done so with this permit. The regulatory and technical reviews by DAQ incorporated regulatory changes that occurred during the review process – as examples: changes for PM2.5, lead, quarry operations and coal handling and preparation. The draft permit includes a lower limit for NOx than what was in the application, a lower limit

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for PM from the main stack than what was asked for as BACT in the application, and lower grain loading limits on the main stack bag filter than what was supported in the application. Changes in the coal handling and preparation regulations recently finalized by the EPA will also require some lower limits and additional conditions to be incorporated in the final permit.

The draft permit clearly states, as Carolinas Cement Company has stated so many times before, that the new NESHAP and NSPS regulations for cement plants that are expected to be finalized next year will be applicable to this cement plant as a new facility. Moreover, the final content of the new rules is still uncertain. Within the existing regulatory framework, the DAQ cannot incorporate pending or proposed regulations in to a permit. But, pending or proposed regulations are no reason to delay the issuance of a final permit. Just as the DMV does not stop issuing driver's licenses if there is a pending change in driving regulations, the DAQ must continue with issuing permits --- and, when the new regulations are finalized, the new limits will apply. Once finalized, the new regulations will be self-implementing and will apply to this plant. CCC acknowledges this and is prepared to comply with the new regulations once they are finalized and become effective. It will be incumbent on the plant to install effective equipment and demonstrate compliance – and at that time the DAQ will have ample opportunity to incorporate operating and monitoring conditions for new limits and new equipment in the final Title V operating permit for the facility. The final Title V operating permit will also be subject to public and EPA review. There is no regulatory or technical basis to delay this permit further because of what may be finalized in the pending cement regulations.

Response to EPA Comments

In regards to the comment letter from EPA Region 4, the letter appears to read as if the EPA is requesting the DAQ to prepare a permit based on proposed regulations. This may not be the intent, rather the EPA is likely asking DAQ to consider information used to derive the proposed regulations in their analysis and drafting of the permit. The analysis conducted by the DAQ within the context of existing regulations supports the limits that the DAQ included in the permit. The proposed regulations once finalized will apply in full force to the proposed CCC plant regardless of the language in the current draft construction permit. To specifically address the EPA comments:

1. **PM_{2.5}** - PM_{2.5} was appropriately addressed by DAQ. CCC was requested to conduct additional analyses as soon as a formal policy determination was made by North Carolina, and CCC was the first in North Carolina to address modeling of PM_{2.5}. We agree with the EPA that the preliminary determination should reflect this.
2. **NSPS Applicability** – The permit can only be written with respect to the current NSPS. As mentioned above, the new NSPS once finalized will be self-implementing and will apply and there is no need to delay issuance of the construction permit or conduct further review. The EPA appears to suggest that the proposed NSPS is BACT. The cement industry provided substantial comments on the proposed NSPS that counters the EPA's position, and therefore, the proposed NSPS does not represent BACT.
 - a. **Particulate Matter** – The proposed NSPS does not reflect BACT. A thorough BACT analysis was conducted that supports the limit in the permit. Nonetheless, if the EPA's proposed limit under the proposed NSPS is finalized, it will automatically apply.
 - b. **Sulfur Dioxide** – Again, a thorough BACT analysis supports the SO₂ limit in the permit, and the permit limit meets the proposed NSPS limit. The EPA repeatedly comments that the limits in the permit should meet the proposed regulations, and when it does, EPA suggests even lower limits. The EPA questions the ability to meet the permit limit, but CCC is

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confident in its analysis and the proposed equipment that the facility will be able to comply with this limit. It will be incumbent on the plant to meet this limit or not operate. With regards to the BACT analysis for SO₂, it cannot be assumed that waste materials from a wet-scrubber can be used to off-set gypsum. While this has been the case in a few cement plants, in other cement plants impurities such as chlorides have made the gypsum unusable in cement and the materials must be properly disposed at a significant cost. The EPA cannot guarantee that these waste materials can be reused and therefore, proper analysis must include cost of disposal. EPA also indicates that a 20-year amortization period should be used in the analysis. The cost analysis in the permit application utilized an economic life of 15 years for wet scrubbers consistent with the EPA Air Pollution Control Cost Manual (EPA/452/B-02-001, Section 5 Chapter 1 and Section 6 Chapter 2). Furthermore, as the very few cement plants that do have wet-scrubbers have only had them for a few years, the operation life of this type of equipment in a cement plant is unknown and it is prudent in the analysis to use a 15-year period. EPA and DAQ should note that no cement plants in EPA Region 4 currently have a wet scrubber. Finally, with regards to the comment regarding the modeled percentage of the SO₂ NAAQS, we are compelled to point out that at the locations where the higher percentage of the NAAQS is modeled the vast majority of the SO₂ is from other sources. For example, at the location where 93% of the 3-hour SO₂ NAAQS is modeled, the CCC facility contributes less than 0.5%.

- c. Nitrogen Oxides – An uncontrolled NOx emission rate of 2.0 lbs/ton of clinker as suggested by EPA Region 4 is not applicable for this facility. We note that the EPA's June 16, 2008 proposed NSPS assumes a higher baseline NOx emission rate of 2.5 lbs/ton of clinker without additional controls. The evaluations provided to the DAQ as part of the BACT analysis demonstrate that the on-site materials to be used at this plant will yield a harder burning mix that justifies the baseline used in the BACT analysis. Therefore, the BACT analysis supports the permit limit for NOx. Nonetheless, if the EPA's proposed limit under the proposed NSPS is finalized, it will automatically apply.

3. **MACT Applicability** – The proposed MACT limits are not appropriate as BACT. The EPA comments also imply that BACT is applicable to mercury, hydrogen chloride and total hydrocarbons – it is not. BACT for PM is discussed above. The limits in the permit for parameters addressed in the EPA's MACT Applicability comment are based on current regulations, and this is the only way they can be addressed in a permit at this time. Nonetheless, if the EPA's proposed limits under the proposed MACT are finalized, they will automatically apply.

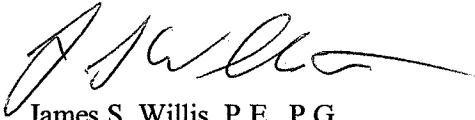
Closing

By issuing a Permit to Construct based on the current regulations there is no attempt to avoid the forthcoming regulations and the lower limits that they may bring. There will be no avoiding the new regulations, and final regulatory limits will absolutely apply. For any process to move forward, action must proceed within the legal and regulatory constraints in place at that time. By the DAQ issuing this Permit to Construct the process will be able to continue, designs will be able to proceed, and time-critical tasks will be able to take place. When the new regulations are finalized and become effective, the plant will comply with all final regulations and limits as a new plant - this is an undisputed requirement for this plant to be able to operate. The plant will be required to obtain a Title V Permit to Operate, the DAQ will ensure that the Title V permit includes all applicable conditions and monitoring requirements of the new regulations, and the public and EPA will have their legal right to review and comment upon that Title V permit. This will ensure that the CCC plant is properly permitted, fully compliant, and protective of the public and environment.

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We appreciate the hard work by DAQ and the constructive changes they made to this permit. We look forward to receiving the permit, and moving forward with building a cement plant that will bring tremendous benefits to North Carolina.

Sincerely,



James S. Willis, P.E., P.G.
Corporate Environmental Manager

cc: Donald van der Vaart, Ph.D., P.E. (via e-mail - donald.vandervaat@ncdenr.gov)
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