



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2

290 BROADWAY

NEW YORK, NY 10007-1866

DEC 15 2008

Mr. Kent Berry
Environmental Quality Management, Inc.
3325 Durham-Chapel Hill Blvd, Suite 250
Durham, North Carolina 27707

Re: Air Dispersion Modeling Protocol for the Lafarge Ravena Modernization Project.

Dear Mr. Berry:

The U.S. Environmental Protection Agency, Region 2 Office reviewed the additional information in the November 21, 2008 Air Dispersion Modeling Protocol for the Ravena Plant Modernization Project. The project is a modernization of the existing Portland Cement plant which you anticipate will be subject to PSD review only for carbon monoxide.

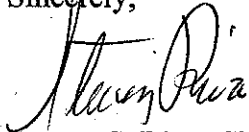
In summary, the protocol proposes to use the EPA dispersion model AERMOD with 5 years of recent meteorological data (2003-2007) from the Albany Airport for both upper air and surface data. This model and meteorological data set is acceptable. However, we are still unclear about one of the issues we raised in our last letter to you dealing with impacts due to startup and shut downs. The November protocol states that the carbon monoxide emissions will not vary during these times and that this modeling scenario is essentially not applicable. Although, emissions may not change, the stack flow characteristics may change under startup/shut down conditions which could lead to higher impacts. While you claim that impacts from an intermediate operating load of 75% will be addressed this is not the same as startup. We do not have enough information to assure us that this is not an issue which needs to be addressed. Additional information such as the expected frequency of startup/shut downs due to maintenance or re-bricking for example should be included in a response to this letter.

In addition, the protocol proposes to use the latest 3 years of carbon monoxide data which was measured in Loudonville (2005-2007) as a surrogate for preconstruction ambient air requirements. This is a NYSDEC monitor which has met QA procedures and data capture requirements. EPA agrees that this is an acceptable surrogate for carbon monoxide background concentrations.

Please be sure to include all modeling data on a CD diskette with the files clearly labeled for our review. The CD must include the AERMET, AERMAP, AERSURFACE and AERMOD files. The text of the application should identify the modeled impacts along with the date and location of the controlling impacts. Again, please be sure to address

our previous comments in the application such as those relating to Environmental Justice and the Endangered Species Act. If you have any question regarding this letter, you may contact Annamaria C. Coulter of my staff at (212) 637-4016.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven C. Riva". The signature is written in a cursive style with a large initial "S".

Steven C. Riva, Chief
Permitting Section, APB

cc: Leon Sedefian, NYSDEC

**New York State Department of Environmental Conservation
Division of Air Resources**

Bureau of Stationary Sources, 2nd Floor
625 Broadway, Albany, New York 12233-3254
Phone: (518) 402-8403 • **FAX:** (518) 402-9035
Website: www.dec.state.ny.us



Alexander B. Grannis
Commissioner

MEMORANDUM

TO: Don Spencer, Region 4

FROM: Leon Sedefian, BoSS/IAMS

SUBJECT: Review of Revised Modeling Protocol for Lafarge Project

DATE: 12/17/08

We have reviewed the revised November 11, 2008 *Air Dispersion Modeling Protocol* and accompanying information on the building and stack parameters for the Lafarge modernization project. The revised protocol addressed most of our comments and provides information we had sought, but not at the level of detail expected. However, the best approach to assure that the modeling methodologies will conform to our comments is to provide our expectations for the remaining items which should be detailed in the application. I also note that, as previously, we have not reviewed the emission and stack information and will rely on your review of their adequacy during the application review process.

With respect to our 10/31/08 comments we note:

1) The stack parameters and emissions data provided indicate a variation in operations only for sources venting through the Kiln #3 stack and only scenario #8 is proposed to be modeled for short term impacts, without an explanation. We assume this means that scenario #8 stack temperature and exit velocity will be combined with the maximum allowable emission rates provided in the Table to assure worst case impacts will be calculated due to essentially lower end values of the former parameters in the various scenarios noted. This approach is acceptable, but any adjustments to the operation scenario emissions will require other scenarios to be modeled. In addition, it is noted that none of the other sources will have any significant variations in the stack parameters and we will rely on your confirmation of this information.

2) The submission provides proposed dimensions of the pre-heater tower and photos of similar towers from other Lafarge facilities, and the heights of other structures which could influence GEP stack determination and building downwash effects. The photos indicate that the tower will likely influence both these determinations due to the relatively "solid" nature of the tower. However, we expect a final set of these dimensions (including the missing horizontal

dimensions) for all these structures will be analyzed by BPIP and used in the AERMOD modeling for the application document.

6) The revised protocol did not address items 2 and 6 of our previous comments and these should be detailed in the application and the SEQRA process, as appropriate.

If you have any questions, let me know.

cc: M. Valis
R. Stanton
A. Coulter, EPA Region 2