



Mr. Steven C. Riva, Chief USEPA Region 2 Permitting Section, Air Programs Branch 290 Broadway New York, NY 10007-1866

Subject:

Revised PSD Air Quality Modeling Analysis & Environmental Justice Evaluation Energy Answers Arecibo, LLC Arecibo Renewable Energy Project

Dear Mr. Riva:

Thank you for your review and comments provided in your letter dated October 11, 2011 regarding the following submittals related to the air quality dispersion modeling analysis for the proposed Energy Answers Arecibo Renewable Energy Project (AREP):

- PSD Air Quality Modeling Analysis dated July 2011
- Response to Comments to the PSD Air Permit Application Air Modeling Issues dated August, 2011
- Preconstruction Monitoring Waiver (addendum) Request for PM₁₀ & PM_{2.5} dated September 2, 2011, and
- PSD Air Quality Modeling Protocol Addendum for PM₁₀ and PM_{2.5} dated September 8, 2011.

In response to your comments and recommendations, ARCADIS G&M of North Carolina, Inc. (ARCADIS) is submitting the enclosed revised PSD Air Quality Modeling Analysis. In addition to addressing comments and requested clarifications, this report provides a revised demonstration for PM_{10} and $PM_{2.5}$. In a separately bound document, we are also submitting an enhanced Environmental Justice Evaluation for the proposed project. Enclosed, please find three copies of each document.

The responses to your comments in your October 11, 2011 letter are provided below.

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NCENRGY1.0003

ARCADIS

Mr. Steven Riva October 26, 2011

Comment 1:

Regarding the September 2011 preconstruction monitoring waiver request addendum for PM_{10} and $PM_{2.5}$, we agree that the facility continues to be less than the Significant Monitoring Concentrations found in 40 CFR 52.21. Therefore, preconstruction ambient monitoring is not required for PM_{10} or $PM_{2.5}$.

Response:

No response necessary

Comment 2:

Regarding the September 2011 modeling protocol addendum for PM₁₀ and PM_{2.5}, we find the protocol is acceptable. The protocol follows the EPA guidance memorandum dated March 23, 2010 from Steven Page of our Office of Air Quality Planning and Standards. Three years of ambient monitoring data has been obtained from the Barceloneta site at the recommendation of the PREQB. This background concentration will be added to the modeled impacts. We agree that this is acceptable. The emission inventory is also acceptable provided that building dimensions from PREPA Cambalache and the Battery Recycling Company are included in the analysis in order to assess the possibility of building downwash from these facilities.

Response:

Building dimensions for PREPA Cambalache and the Battery Recycling Company are included in the multisource modeling analysis for PM_{2.5}. It should be noted that the multisource analyses for NO₂ and SO₂ have been revised to account for building downwash effects from these nearby offsite sources as appropriate.

Comment 3:

While not stated explicitly, we want to ensure that the receptor grid for a $PM_{2.5}$ NAAQS and increment analysis is extended throughout the circular SIA and not limited to those receptors where the facility only is significant.

Response:

The receptor grid for the PM_{2.5} NAAQS and increment analysis was kept throughout the circular SIA as required. A PM₁₀ NAAQS or increment analysis is not required since maximum impacts are shown to be below the Significant Impact Level (SIL).

Comment 4:

Regarding the July 2011 PSD Air Quality Modeling analysis, various entries in Table 5-2 need to be corrected and QA'ed. For example, the information regarding PM_{10}