# ARCADIS

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Mr. Steven Riva October 26, 2011

and  $PM_{2.5}$  is for 1 municipal waste combustor (MWC) while the information for the other pollutants is for 2 MWCs. In addition, the stack height of the emergency generators and fire-pump is listed as 6 meters but modeled at 10 meters. We understand that the  $PM_{10}/PM_{2.5}$  emission rates need to be revised due to the revised emission rates of the MWCs and cooling towers. However, please ensure that all entries of this Table are correct and correspond to the modeled parameters.

## Response:

The enclosed modeling report includes an updated version of this table with corrected entries.

## Comment 5:

Appendix C of the July Modeling Analysis contains the monitored background information for NO<sub>2</sub>. The 3 year average of the maximum measured concentrations was proposed for calculating the background. This is the average of 0.040, 0.038, and 0.032 ppm which equals 0.0367 ppm (converted to 68.95  $\mu$ g/m<sup>3</sup>) rather than 0.0347ppm. This value should be corrected.

### Response:

The values listed in Appendix C of the July Modeling Analysis and referenced above include data from multiple monitors, located in Catano, San Juan, and Salinas. For the purposes of this demonstration, however, we understand that referencing the single monitor located in Catano is representative of background concentrations for the Arecibo area. This single monitor approach is outlined in the modeling protocol accepted by EPA and was implemented in the July 2011 modeling report. Therefore, the 0.0347 ppm value is correct and has not been changed.

It should also be noted that the background value for SO<sub>2</sub> has been adjusted as an average of actual monitored values rather than the average of calculated percentiles.

### Comment 6:

Compliance with the 1 hour NO<sub>2</sub> and 1 hour SO<sub>2</sub> NAAQS is demonstrated if the annual distribution of the 98th percentile of daily maximum 1 hour NO<sub>2</sub> or 99th percentile SO<sub>2</sub> impact at each receptor is less than the NAAQS. This may be shown with AERMOD in a few ways. One way, is to output the MAXTABLE and ensure that the maximum concentration for that percentile plus background is attained. If not, the MXDYBYYR should be used to see the extent of the exceedances at other receptors including those at lower percentiles. The MAXDCONT postprocessor may then be used to see which source(s) cause to contribute to the exceedances.