

The above procedure should be followed in this case. We do not recommend the procedure used in the application which ranked the maximum impacts regardless of the receptor location and hour. The form of the standard is such that the ranking must be done at each receptor rather than across the receptor field.

Response:

The attached modeling report has been revised to follow the procedure described above. The presentation ranking the maximum daily values regardless of receptor or hour is omitted.

Comment 7:

The GEP stack height is defined as the greater of 65 meters or the formula height. Other than the MWCs, the GEP stack height is 65 meters. Table 5-1 should be corrected.

Response:

Table 5-1 in the attached modeling report has been revised to show the 65 meters GEP stack heights.

Comment 8:

The emission rates in the start up and shutdown modeled scenarios are based on the MWCs operating at 100% load (or 500 MMBtu/hr). The start up/shut down emissions should be based lower loads which cap out at 80% load (or 400 MMBtu/hr). The emergency generator and fire pumps are also modeled at full emissions without consideration of the 30 minute duration. These impacts should be revised. In addition, please clarify whether the corresponding parameters listed in Appendix B of the July submittal is for 1 or 2 MWCs.

Response:

The modeling analysis for startup and shutdown emissions has been revised to account for the 30 minute duration for testing the emergency generator and the fire water pump. This was done by adding an emission factor of 0.5 to the EMISFACT keyword which is already in the model runstream to implement the time of day restriction on testing this equipment. The modeling analysis covers three phases of the startup sequence where each phase is represented as a separate Source Group in the model runs. Similarly, there are two phases for the shutdown procedure and each is modeled as a separate Source Group in the model runs. Further details on the startup and shutdown analysis are provided in the attached modeling report.

The parameters in Appendix B of the July submittal are for one boiler. The boilers are identical, so the parameters show are representative of each unit.

Comment 9:

The Environmental Justice analysis should be expanded to include low income areas surrounding Cambalache in order to see whether there are disproportionate or adverse impacts. The EPA Region 2 EJ Interim Policy defines this distance as the furthest distance after which the impacts level off to a concentration that is less than the Significant Impact Levels. We also recommend doing a qualitative assessment of the air toxic emissions in the surrounding areas. All the documents pertaining to the EJ analysis including all public outreach that was performed should be consolidated into one document for ease in review.

Response:

A revised consolidated EJ evaluation was prepared, including public outreach efforts and a limited review of the local air toxics emissions. This evaluation was prepared considering the EPA Region 2 EJ Interim Policy guidance document. Enclosed, please find three copies of the consolidated EJ Evaluation that provides the following:

- The original EJ Study
- The updated assessment for fluorides and lead
- The update assessment for the revised PM_{2.5} and PM₁₀ emission rates
- Isopleth maps that cover the area where the proposed facility impacts are above the SIL, demonstrating that there is not a disproportionate impact on low income areas
- A figure identifying the location of sources of air toxic emissions in the Arecibo area and surrounding Barrios per the EPCRA TRI reporting databases.
- Isopleth maps showing the distribution of maximum predicted impacts by the full multisource modeling demonstration completed for the one-hour SO₂ and NO₂, and maximum 24-hour PM_{2.5} standards.

ARCADIS

Mr. Steven Riva
October 26, 2011

Comment 10:

Please ensure that copies of all submittals are provided to Ms. Evelyn Rivera-Ocasio in our EPA Office in San Juan.

Response

Copies of the attached submittals will be sent to Ms. Evelyn Rivera-Ocasio.

If you have any comments or questions regarding the attached Revised Air Quality Modeling Analysis or Environmental Justice Evaluation for the Energy Answers project, please contact me at (919) 854.1282. I can also be reached via e-mail at kevin.scott@arcadis-us.com.

Sincerely,

ARCADIS G&M of North Carolina, Inc.



Kevin R. Scott, P.E.
Certified Project Manager

Copies:

Mark Green – Energy Answers