

Electronic Conversation for the Hydrogen Energy California (HECA) Project (08-AFC-8)

>>> William Walters <Wwalters@aspeneg.com> 2/27/2012 3:03 PM >>>
Gerry,

My notes, most fairly minor, on the protocol supplement are as follows:

Specific Comments:

- 1) Page 3 – Second bullet. Should the last sentence be written as “...natural gas burner/nozzle under a much shorter time duration.”
- 2) Page 4 – Urea Unit discussion. It would be useful if the terminology “essentially inerts” for the treated vapors was clarified...such as “(i.e. primarily nitrogen)” as necessary to properly define the inerts.
- 3) Page 8 – Second to last paragraph. The use of EMFAC2007 to determine on-road emissions may be problematic for the CEQA modeling analysis given that it isn't the State approved model. The modeling of mobile source emissions is strictly being performed to meet CEQA analysis purposes so some additional discussion of why the out-of-date EMFAC2007 is appropriate or conservative should be provided. A discussion of the comparison of emissions factors, particular if EMFAC2007 would provide conservative emissions factors for the incoming/outgoing delivery trucks, both for criteria pollutants and DPM if true, would alleviate this concern.
- 4) Page 9 – Meteorological data selection. It is understood given SJVAPCD modeling guidance why the Bakersfield meteorological data was selected for the criteria pollutant modeling analysis, but there is MM5 derived meteorological data from the west side of air basin that could be used for the HRA modeling. Please discuss why this data isn't being used and identify if SJVAPCD was consulted about the use of this data for the HRA and the results of that consultation.

General Comments

- 1) Without a complete PFD and material and energy balance it is difficult to determine if all of the potential new emissions sources have been identified in this protocol supplement. For example, is there no potential for ammonia emissions from the ammonia synthesis unit described on Page 4; or ammonia and/or nitric acid vapor off-gassing from the Ammonium Nitrate Unit, or nitric acid vapor from the UAN solution units that are both described on Page 5? Please be aware that the Energy Commission will require a complete PFD with a material and energy balance to confirm the emissions/modeling inputs, as well as other for other analysis purposes.
- 2) It is unclear if any air dispersion modeling of ammonia will be performed for nuisance odor, although we assume it will be included in the HRA modeling. Please specify if the new ammonia sources will be included in modeling that can assess odor impacts, including peak emission events. If not it should be clear in the emissions documentation that the ammonia emissions would not have the potential to exceed odor thresholds.
- 3) Fugitive emissions from new piping component systems do not appear to be addressed. There is no description of the new fugitive emissions sources associated with the new fertilizer production process. These are expected to include at the very least the ammonia and nitric acid piping component fugitive emissions. The description of these emissions sources, whether they are negligible emission sources, and if found not to be negligible whether they would be included in the modeling analysis should be included in the discussion.
- 4) While not specifically mentioned we assume that near-field CO₂ modeling and H₂S odor modeling will be completed as was previously the case.

DOCKET

08-AFC-8A

DATE FEB 27 2012

RECD. FEB 29 2012

Please let me know if you have any edits/comments or want me to put this into a letter format (I would need the current letterhead), or if you'll have Nancy take care of that assuming you are going to formalize these comments. If you prefer I could e-mail the reviewed comments to Julie Mitchell, after your review, and keep the e-mail as a reference for the SA. I'm around the rest of the day today and all day tomorrow if you want to call and discuss these comments. I'm sorry this took so long, I was under the gun last week to get out a major AQ section/modeling analysis and then had mandatory training on Friday. Thanks.

Will Walters, Aspen
818-338-6757

P.S. I saw your message today and I am setting up travel for a full day (at least as early as I can make it) in Sacramento on the 22nd.

From: Mitchell, Julie [mailto:julie.mitchell@urs.com]
Sent: Tuesday, February 21, 2012 3:13 PM
To: Leland Villalvazo (Leland.Villalvazo@valleyair.org); Holladay.Cleveland@epamail.epa.gov; Gerry Bemis (gbemis@energy.state.ca.us); William Walters
Cc: Homero Ramirez (Homero.Ramirez@valleyair.org); Kelly.Shaheerah@epamail.epa.gov; Bohning.Scott@epamail.epa.gov
Subject: HECA modeling protocol supplement

URS has prepared a supplement to the previous HECA modeling protocols that describes changes to modeling analyses that will be conducted for the revised HECA project. This modeling protocol supplement also provides a brief overview of the new emission sources. If you would like a paper copy of this protocol, please let me know and I will send one to you.

Please provide any comments about the protocol to me as soon as possible as we are currently starting the modeling analyses. If you have any questions please do not hesitate to contact me.

Regards,
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