Message

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Sent: 8/30/2017 12:33:13 AM
To: Fennessy, Christopher (christopher.fennessy@Rocket.com) [christopher.fennessy@Rocket.com]
CC: Plate, Mathew [Plate.Mathew@epa.gov]; Tom.Lae@CH2M.com; Stralka, Daniel [Stralka.Daniel@epa.gov]; MacNicholl, Peter@DTSC [Peter.MacNicholl@dtsc.ca.gov]; MacDonald, Alex@Waterboards (Alex.MacDonald@waterboards.ca.gov) [Alex.MacDonald@waterboards.ca.gov]
BCC: Keller, Lynn [Keller.Lynn@epa.gov]
Subject: EPA Comments on the Aerojet Area 40 Ambient Air SAP
Attachments: ArjtAmbntAr16CA0026QV1MP.PDF

Hello, Chris.

In addition to our discussion yesterday, please consider this email and the attached memo from our QA team as EPA's comments to the Aerojet Area 40 Draft Ambient Air SAP.

EPA requests that Aerojet revise and redline the Draft Ambient Air SAP in accordance with these comments and submit the revised Draft to EPA and the agencies at least 24 hours prior to undertaking the first round of ambient air samples. In addition to Matt Plate's comments in the attached memo, please address the following comments/questions in your revised Draft SAP:

1) Thank you for the photo of the proposed local met station position in the A40 NE source area; please include photos and discussion of placement rationale in the revised Draft SAP.

2) Please include additional rationale for only one background AA sample per our discussion.

3) The proposed sampling locations for both the Ambient Air and Flux chamber samples appear to be reasonable. If widespread detections of COCs from the passive samplers (and Flux Chamber) are found, additional locations should be identified and a more robust sampling effort be considered.

4) Ensure that the SAP text allows for Agency analysis of quarterly data and adjustment of sampling numbers or locations as needed. Any proposed reduction in sampling locations by Aerojet for successive quarters must be technically justified and agreed upon by the Agencies.

5) It is suggested that surface area to be modeled in AERMOD be superimposed onto the flux chamber locations. Please clarify what area is being modeled, and where that area is in relation to current and future human receptor locations.

6) Regarding using flux chamber data in the air modeling, which value or statistic from the flux chamber data will be used as the emissions flux from across the site surface area? The average, maximum or other statistic? It's not clear how these data will be grouped spatially or across seasons to calculate the modeling source term.

7) Regarding the flux chamber data used in the air modeling, what averaging times are being modeled? AERMOD can model from 1 hour to annual averages. 24-hour average concentrations should be modeled for assessing short-term risks, as well as annual averages for modeling long-term and cancer risks.

8) Generally, flux chambers give better results at sites with high vapor source strengths (such as landfills). This site appears to be a low-source-strength site. The reporting limits for TO-15 seem fairly low, so that non-detected results from flux chamber samples should be useable for modeling low-level risks in ambient air. Consequently, it may be hard to know if non-detected results mean low source strength in soil (below reporting limits in the

TO-15 samples) or a failed flux chamber test due to leakage or some other problem. How will the results show the differences between low source strength and a testing failure?

9) The SAP needs to describe how the passive monitoring ambient air results are going to be used. According to the SAP and our discussion yesterday, it appears most of the risk assessment will be based on flux chamber data and modeling. It's generally difficult to get modeling and monitoring results to "agree", and EPA and CH2M are skeptical of the proposed flux chamber results. Will the Radiello results be used to calibrate/adjust the AERMOD model? Please elaborate. Does AERMOD model 7-day averages?

10) The SAP needs to discuss how results of this sampling effort will be folded into the site-wide Risk assessment.

Per our discussions on the four quarters of ambient air data for Area 40, EPA will not require inclusion and analysis of all four quarters of data in the HHRA prior to finalization. However, as we've discussed, EPA does want the additional soil gas and monitoring well data incorporated in the RI supplement and analyzed in the HHRA prior to finalization.

EPA is trying to accelerate our reviews of this AA SAP and finalization of our own AA split sample SAP to accommodate AR's short lead time on collecting samples to capture the seasonal high summer temperatures. Per our discussion today, we will get our split SAP in place and be ready to collect AA splits on Friday morning, 1 Sept. However, we request that Aerojet incorporate our requested changes via redline into the draft SAP by COB Weds 30 Aug to give us at least one day to review the updates prior to sampling. If the revised SAP cannot be submitted to EPA with at least 24 hour lead time to the ambient air collection date, the sample collection should be delayed to the next non-holiday weekday.

Thank you in advance for addressing our concerns and please give me a call if you'd like to discuss this further,
Lynn

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