



To: Brian Snuffer, PE

From: Max Hueftle, PE, BCEE

Date: September 23, 2020

RE: Follow up from 9/22/2020 LRAPA and J.H. Baxter & Co. Meeting on Emissions Estimate Approach for Cleaner Air Oregon (CAO)

Here is a summary of our discussion yesterday including items we believe we may need to further evaluate the emission estimation approaches proposed.

Retort Door Openings:

1. For the empirical equation, we are requesting background on the 2010 analysis used to develop the equation along with the source test data.
2. Please explain further how naphthalene would be used as a baseline by which other components would be multiplied using the vapor mass fraction (VMF) ratio to naphthalene.
3. LRAPA is concerned that the approach may underestimate emissions. 1 lb naphthalene per opening from Guthrie Koppers 2012 data vs. 0.1 lb/opening using the equation.
4. There are concerns with the study's use of Tedlar bags in lieu of SW-846 Method 0010 modified EPA Method 5 sample train.
5. LRAPA asked if the "crac and vac" procedure would be reflected in the "t" part of the equation for time, and provided the caveat that CAO permit compliance monitoring may increase with increasing degrees of complexity in the emission estimation approach.

Drip Pad and Storage:

1. Since this the approach is heavily dependent on temperature corrections, LRAPA is requesting assurances and considerations to other approaches that do not underestimate emissions; LRAPA is requesting clarification on how the 24-hr California Pole Test Temp was used to calculate temperature corrections.
2. LRAPA believes the Feather River study is generally good but are concerned that it may not be representative of other facilities and other treatment solutions at other facilities (e.g., 50/50 and ammonia-based).
3. Representative stacking geometries is also a concern LRAPA has and is requesting assurances that the test results are representative of the stacking geometries at the facility (including gaps in treated product, etc.). There are acute concerns with the use of "average" stacking geometries.
4. Biggest concern and uncertainty are the water corrections. LRAPA understands that there is essentially a water correction in working solution and a water correction again to the VMF which may result in sort of double counting of water.

Other:

1. Since the TRI spreadsheets will be used for the vacuum system and storage tanks, LRAPA requests versions of those files that include the formulas so that we can review and more easily track the calculations.

2. LRAPA asked for assurances that there are no emissions from railcar/truck unloading. We understand that the facility no longer conducts air agitation but want to know if the trucks/railcars are heated and if there are any emissions.

LRAPA will provide specific feedback on emission estimations and the inventory once it is received.

Please let me know if you and the facility have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Max Hueftle".

Max Hueftle, P.E.
Permit Section Manager