

**Discussion of NMED Soil Vapor Sampling Letter  
Webex meeting with KAFB at 3pm 9/9/21**



**CCatechis, Ricardo Maestas, BWear, LAndress, Chris Segura, Ryan Wortman, call-in user\_2**

CC led meeting: Sampling protocol implemented in 2015 – we are not saying data since then is no good.

Want to talk about AF concerns:

- 1.) Samples since 2015 not representative, we are not saying not to use that data or that data is bad but how you go forward.

Ryan: that is the sentence got us going and looking into purge volume from 1 back up to 3. The methodology changes in 2015 were made in TWGs – expert Bruce Allen brought in, it was the rebound and respiration soil vapor data set and changing it down to 1 purge volume was to get the most representative data. EPA guidance says 1 purge volume is best and if we get up to 3 the sample could have reduced concentrations. We want to have accurate data moving forward to CME. We have an approved work plan, we need to follow, we can't deviate, we will need many more sample events to get a complete data set. He will send EPA guidance they are following with the purge volumes.

RW: The TPH part was removed in an optimization memo in 2016 and approved by NMED that TPH could be removed. Putting it back is ok. The language said the Permittee removed TPH, Permittee did not remove TPH, they had an approval from NMED to remove it. Implementing adding TPH in Q4 2020 difficult, it's too soon. They would like clarification to add in Q2 2022.

Chris Segura: thanked CC for having this. When we talked about purge volumes, EPA guidance conflicts with direction NMED is giving. They have approved WP they are following. ----missed something--- They will provide documentation on why they don't agree with that. Ryan will share the EPA guidance they are following. We do have the WP approved approving that methodology.

BW: Which WP?

RW: the methodology change was part of the soil vapor extraction shut down pilot test in 2015, when we changed contractors, the methodology was carried forward to a WP, he will send that as well with the EPA guidance.

BW: we are unaware of the updated work plans. There are also issues with pore volume calculations issues, seriously underestimate a single purge volume

RW: he has looked at that multiple times, they use a casing volume and borehole volume, he doesn't think there is an underestimation

BW: AF using length of screen for sand pack when it is longer than that. Also using the smaller of the larger borehole diameter, so that the AF's estimate is up to 60% low.

RW: asked about the two different diameters

BW: t's the two different drilling diameters



RW: that's what you are referring to

CS: would like to be more prepared and have another call to discuss this. Would like to know what they can do to help NMED understand this. Ryan will send over EPA guidance and approved WPs.

CC: sounds good

CS: asked RW can we get that out today or tomorrow morning at the latest?

RW- yes

CC- anything from NMED?

BW- the approved wp he looked at was from 2011, the purge rate is 2-3 times higher than approved in that plan. Low purge time, hard to get all parameters, etc...

RW-thanked him, a lot if that is in the wp'she will send also they looked at the Reynolds eq for laminar flow in well casing

CS- thanked CC for having this meeting

End of meeting 3:18pm