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Importance: Normal

Ex. 5 - Deliberative Process

From: Hanson, Kristen [mailto:KHanson@ldftribe.com]
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Subject: Pilot Study Workplan- technical team materials, alternative excavation location and

feedback Haskell Lake/Tower Standard TNR 4-2015

Good Morning Technical Team,

Alternative Excavation Location

Pursuant to our discussion on Monday, I have attached Weston's map showing an alternative excavation location for technical discussion.

Tribal Council Direction regarding Location of Activites

Tribal Council has taken action on the draft workplan requiring placement of the excavation within the source area. Tribal Council has made room on the October 5 meeting for consideration of final plans.

Feedback from USGS

USGS has been provided all of the data collected thus far and have been working on two projects related to the site. These include the Porewater Sampling Project and the Surface-Water Groundwater Interaction Study. Mr. Leaf from USGS was provided the draft workplan and has provided the following suggestions:

Below are some suggestions that came to mind after reading the draft pilot study work plan dated 9/19/2017. They may be a bit premature if the pilot study work plan is preliminary to both a more detailed pilot test plan and additional plan for an interim or corrective measure. As far as placement of the pilot excavation and AS/SVE, it seems like it would make sense to perform them near the source area, to ensure that the deposits encountered are similar to those that a full-sized treatment system would work in. And if there's long-term cost savings associated with that, even better, but beyond that I don't want to comment too much on the engineering specifics, as I feel that is outside of USGS's role.

I'll attach some provisional slug test and seismic depth to bedrock estimates in another email. I think those would be most helpful out of the data we've collected in informing an AS/SVE system. Feel free to give me a call though if you questions or other ideas.

Suggestions on 9/19/2017 Draft Pilot Test Work Plan:

A location map is given for the excavation area but not AS/SVE test. Where will that be located? How will effectiveness of the AS/SVE be evaluated? I'm assuming this will be addressed in the Pilot Test Plan.

A 16-18 foot excavation depth is assumed, but the final excavation plan for the Interim/Corrective Measure should ensure adequate confirmation sampling to demonstrate that the goal concentration has been achieved at the bottom of the excavation pit. There should be a contingency plan to continue excavation in the event that soil concentrations are above the target levels at the planned excavation depth.

Numerous monitoring wells have been installed at the site over the last two decades, but few have been logged. At least some of the deep (50-60 foot) wells installed for the pilot test should be logged by a geologist. Previous investigation (e.g. the recent MIP/HPT survey) has indicated the existence of interbedded coarse/fine deposits in the upper approx. 15 feet below ground surface in the vicinity of the source area. It would be ideal to collect continuous core and have that logged by a geologist, so that these features can be adequately characterized. Knowledge of the extent and character of these deposits is useful for the site conceptual model, and may have implications for SVE.

As these plans develop, I look forward to involvement in the cooperative coordinated technical approach to assess and remediate the Haskell Lake/Tower Standard Site.

Sincerely,

Kristen Hanson

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