

2024-03-14_Gasco OU FS PM Call

Meeting Title:	Gasco OU FS PM Call
Date/Time:	March 14, 2024 / 10:30 - 11:30 am
Attendees:	AQ: Halah Voges HAI: Rob Ede DEQ: Wes Thomas
Location:	WebEx Meeting

Meeting Notes:

- Segment 3 Source Control Evaluation
 - HAI/AQ discuss preliminary results of their Segment 3 data screening in support of a SCE that will be included in the FS. The purpose of the SCE is to evaluate where groundwater is already meeting source control objectives or where groundwater treatment, including MNA, may be considered as an alternative to the barrier wall.
 - Groundwater data south of the Gasco sediment site boundary are low, and generally below Table 17 cleanup levels.
 - The portion of Segment 3 adjacent to the Gasco sediment site, where the wall will be deferred appear to have more slightly elevated COC concentrations. In this area, groundwater under the river has higher concentrations than the shoreline, and groundwater flux control in this area may still be necessary to prevent mobilization of contaminated groundwater.
 - DEQ will look into the evaluation and may seek coordination from EPA to understand the need for flux control.
 - DEQ notes that any remedial action to the south of the Gasco sediment site, which may include a cap, would be designed around existing groundwater flux, and DEQ doesn't anticipate needing additional flux control to support other project areas.
 - HAI/AQ are also planning to do some fate and transport evaluations to supplement the data screening, and should be able to present more complete results and recommendations in April.
- IRAM - Bulk ISS of Residual DNAPL
 - HAI/AQ are in the process of reviewing the boring/TarGOST logs for residual DNAPL within the IRAM footprint. Conceptually, the preliminary findings are that the residual DNAPL within the IRAM footprint is based on low-level TarGOST %RE that is just over the "background" threshold for the sensor. The mapping of residual DNAPL in the IRAM footprint is primarily based on TarGOST data. Essentially, AQ does not believe there is residual DNAPL in the IRAM footprint, and that all of the DNAPL is potentially mobile.
 - HAI/AQ believes that the contouring program (inverse distance weighting) may have overestimated the residual footprint.
 - DEQ has commented previously that we believe the residual DNAPL footprint is likely overestimated due to the contouring program, which is why we had previously requested a 3D model.
 - HAI/AQ are planning to prepare a table that summarizes information related to residual DNAPL from all of the borings in the IRAM footprint to present during our next meeting.
 - HAI notes that the specific scope of the ISS footprint has been adjusted after re-reviewing and QA/QC of the DNAPL data used for the contouring in consideration of DEQ's comments from our last meeting.
 - DEQ revisits discussion from last meeting and asks if the results of the evaluation will make NW Natural comfortable defining the scope of the IRAM in concept, and using these lines of evidence to refine the scope of DNAPL treatment in the IRAM BODR.
 - HAI/AQ reply that NW Natural would be comfortable moving forward with the IRAM if the scope of DNAPL treatment only included potentially mobile/transitional DNAPL, but excluded residual DNAPL.
 - DEQ replies that we will not accept excluding residual DNAPL. We have proposed that other lines of evidence could be used to refine the extent of

residual DNAPL treatment, but excluding residual DNAPL in general is too broad.

- HAI/AQ will carry that feedback to NW Natural, but do not think NW Natural will be able to agree. NW Natural may want to defer consideration of residual DNAPL to the FS.
- DEQ does not see an opportunity to defer consideration of to the FS. The scope of the IRAM needs to be established in concept now, and refined in the IRAM BODR.
- HAI/AQ would like to discuss further during our next meeting.

- Hot spots

- HAI/AQ state that NW Natural would like to continue discussions about hot spots during our next meeting. HAI/AQ also point to the "hot spot" hierarchy from the Interim FS to suggest that residual DNAPL may not require treatment.
 - ASIDE: DEQ did not approve the hot spot hierarchy in the Interim FS. Any hierarchy was to be subject to further review by DEQ before it would be approved. DEQ has commented before about a hierarchy to prioritize site remediation in general, with proximity to sensitive receptors and the presence of MGP residuals being the highest priority. DEQ considers residual DNAPL to be a MGP residual that is a high priority for cleanup. DEQ disagrees that any previous discussion of hierarchy or priority for cleanup excluded treatment of residual DNAPL.
- DEQ reviews ORS 465.315(1)(e), which states that "For contamination constituting a hot spot as defined by the commission pursuant to subsection (2)(b) of this section, the director shall select or approve a remedial action requiring treatment of the hot spot contamination unless treatment is not feasible considering the factors set forth in paragraph (d) of this subsection." Paragraph (d) lists DEQ's balancing factors: effectiveness, implementability, long-term reliability, implementation risk, and cost reasonableness, where a higher threshold for cost reasonableness for treating hot spots will be used.
- HAI/AQ and NW Natural are familiar with the ORS requirements. NW Natural disagrees that the statutes require NW Natural to include a remedial alternative that treats all hot spots in the FS. NW Natural believes that it is unnecessary to include an alternative for treating all hot spots if a lesser remedy is protective.
- DEQ is not requiring NW Natural to include an alternative that treats all hot spots. However, we require NW Natural to include enough alternatives/range of alternatives to define the feasible limit for hot spot treatment. For example, there is a lot of DNAPL underneath buildings on Siltronic's property. For those areas, it would be potentially feasible to remove mobile DNAPL, but likely infeasible to treat residual DNAPL. However, in areas like the tar ponds, treated of residual DNAPL appears feasible, and we do not agree with NW Natural's interpretation that rule/statute does not require them to include an alternative that treats all feasible hot spots. DEQ reiterates that hot spots must be treated to the extent feasible. The FS needs to establish the feasible limit to treatment. In areas like the former Tar Ponds, hot spot treatment is effective, implementable, reliable (much more reliable than a containment measure that requires hydraulic controls), carries the same implementation risk as work NW Natural is planning to do. In that case, NW Natural will need to establish the feasible limit of hot spot treatment based on the cost balancing factor alone. As we stated in our February meeting, DEQ thinks it will be difficult for NW Natural to establish a cost only-based feasibility limitation for treating large quantities of residual DNAPL (>2.1 million gallons in the Alluvium beneath the tar ponds, not including the Fill WBZ or potentially mobile DNAPL), especially if NW Natural is planning to preemptively exclude a remedial alternative that treats residual DNAPL in accessible areas, like the tar ponds (i.e., never estimating costs for such an alternative).
- HAI/AQ state that NW Natural disagrees and would like to discuss hot spots further.
- DEQ notes that after we "re-booted" the FS in November 2022, NW Natural had a year to set up meetings with DEQ to talk through a range of topics, including hot spots. Those meetings were concluded. DEQ has continuously reiterated our expectations for hot spots in the FS. We do not think there is more to say, nor do we think that our expectations are unclear. DEQ states that NW Natural needs to prepare the FS and make sure that consideration of hot spot treatment meet our rules and statutes and provide enough supporting analysis to justify their approach. We will review the FS, and provide comments if we do not agree with NW Natural's conclusions or believe that the FS evaluations are adequately supported and justified.

- HAI/AQ state that NW Natural may want to go to a formal dispute over DEQ's interpretation.
 - DEQ acknowledges NW Natural has a right to dispute, per the cleanup agreement. However, at this point, DEQ's direction is for NW Natural to prepare the FS. NW Natural's right to dispute would be available only after DEQ modifies the FS, not before the draft FS is submitted.
 - HAI/AQ states that NW Natural does not want to submit an FS that will be rejected.
 - DEQ does not want NW Natural to submit an FS that will be rejected either. DEQ reiterates that we believe our expectations are clear, and that rule and statute are clear. We do not see the value in discussing hot spots further. We can resume discussions after we have reviewed the FS and provided our comments. At this point, we need to re-establish the schedule for the FS.
- Doane Creek Site Visit
 - HAI/AQ discuss the railroad safety training that BNSF requires for access.
 - DEQ does not believe we are a party to the access agreement, and that the requirements in the access agreement do not extend to us.
- LNG Trench
 - DEQ plans on providing comments later today.
- Next meeting
 - It appears that the afternoon of April 11th works best for DEQ/HAI/AQ. AQ will coordinate with NW Natural's schedule to confirm. Depending on NW Natural's availability, the next meeting may need to be pushed to later in April.