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Review comments on the 200-UP-1 Groundwater operable Unit Remedial Design-Remedial
Action Work Plan DOE-RL-2013-07 Draft A.

Dear Mr. Faulk and Mr. Dowell,

The Confederated Tribes and Bands of the Yakama Nation appreciate the opportunity to review
and provide comments on this document.

We look forward to discussing our concerns regarding current cleanup plans for Hanford with
you further.

Sincerely,

Russell Jim
Yakama Nation ERWM Program Manager

cc:

Jane Hedges, Washington State Department of Ecology
Ken Niles, Oregon Department of Energy
Stuart Harris, CTUIR
Gab Bohnee, Nez Perce
Wade Riggsbee
Administrative Record

Attachment:

Attachment#1:

YN comments on the 200-UP-1 GW OU RD-RAWP DOE-RL-2013-07 Draft A.

- Reconcile costs identified in Table 7-1 of WP with Table 12/pg71 of ROD. Costs for RD/RA WP; RDR; Performance Monitoring Plan (PMP); and Project Management appear unrealistic as well as IC costs. Costs for WMA S/SX PLUME O&M doubles with no explanation.
- There is not clear integration of the 200-UP-1 OU O&M requirements with those of the 200-ZP-1 OU's O&M. The O&M for the UP-1 should be an appendix to the ZP-1 O&M plan. These two should be updated concurrently to ensure consistency between the operating systems. (This approach is seemingly stated in Section 2.4.2 line 32).
- The Work Plan seems to lay out a document development process/schedule not supported by the TPA or the post-ROD process. The RD/RAWP should include the SAP. The RD/RAWP should include the designs and implements chosen to support the ROD remedy (i.e., all information proposed to be contained in the PMP & the functional requirements documents.) as well as closure strategy for both past-practice and RCRA TSD sites. The O& M plan should include the elements of PMP.
- The Work Plan needs to define how the SAP will contain the information on how technical/sampling issue will include consultation with Lead agencies. Clarification is needed on the purposed and number of SAPs to be developed.
- The Work Plan needs to define the remedy performance monitoring approach for the aquifer for all RCRA COCs and COPCs, including the MNA approach.
- The reinjection of *treated* water near the margins or down-gradient of the plume, a hydraulic condition will occur to prevent further outward spread of I-129 contamination. What is not acknowledged is that reinjection will be of water containing the very contamination (I-129) the process is trying to prevent and the varied geophysical stratigraphy underlying the plumes. Discussion is needed
- Discussion is needed regarding the issue of just how and when there is to be an evaluation of I-129 treatment technologies and from where the funding dollars for research will be procured.
- There is an implied future use of a *request for technical wavier* without further remedial actions. Discussion is needed to clarify the various reasons and process to amend the ROD.
- It is unclear why Remedial Action Objective (RAO) #3 of the Draft Proposed Plan (DOE, 2010b), where DOE acknowledges the need to protect the Columbia River and its ecological resources from degradation and unacceptable impact caused by contaminants migrating from 200-UP-1, was removed from the Final Proposed Plan (DOE, 2012b). Protecting the Columbia River is a critical goal for the cleanup of Hanford and should be included as an RAO.

- Per Section 7.3.9 of the Tri-Party Agreement Action Plan (Ecology et al., 1989b), DOE will submit a Remedial Design Report to EPA. The Remedial Design Report also needs:
 - Requirements for additional field data collection and treatability studies
 - Health and Safety Plan for design & construction activities
 - Design Criteria and assumptions
 - QA/QC criteria and its inclusion (include Construction QA Plan)
 - Contingency plan in the event of an emergency or accident on site

- Clarification is needed on how the following are being met:
 - Verification that appropriate unit processes are employed by the treatment train;
 - Confirmation that the removal or treatment efficiencies assumed are reasonable for the both the process and waste (concentration and volume);
 - Checking that process waste streams are adequately identified and addressed and that flow rates are appropriate;
 - Spot checking 10 % of the design calculations.
 - Verification that site abnormalities have been addressed if any

- The Viability of treatment option for I-129 should be based on the nine (9) CERCLA criteria, not just two, costs and implementability.

- There is an over-reliance on the ability of the 200-ZP-1 OU systems to capture and treat the contaminants of concern for the 200-UP-1. The design of the 200-ZP-1 facility is not robust enough to guarantee the treatment of chromium (total or hexavalent). Far-field well area contamination (Chromium in the south & Nitrate to the North) will not have a complete remedy. How will the remedy for groundwater meet the goal without addressing future impacts from sources in the vadose zone?

- Relying solely on a system (anaerobic and aerobic biodegradation) that has not been demonstrated to be a proven technology for the removal of a non-organic contaminant, does not meet the CERCLA remedy requirements to remediate all contaminant concerns. Instead of unfounded reliance on future technologies, we suggest utilization of the successful the ion-exchange resin that has been developed and evolved into the one they use now on the River Corridor for capture of chromium and strong base resins like Dowex 1 and Purolite A909 as ion exchange media for removing I-129?

- The active phase of treatment extends for only a short period of time with reliance on use of Institutional Controls (ICs) and Monitored Natural Attenuation (MNA) for nearly a hundred years. We remain concerned that our Treaty Rights will be infringed upon with the needed extensive remediation of the groundwater as there will be continued effects and potential new COCs from the Tank Farms not considered in this Proposed Plan.

- We are concerned that any remedy reviews will not include actual sampling actions or technological systems review to confirm performance. Please clarify this will be done.