

DRAFT HAB Advice on Central Plateau Inner Area Guidelines

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Background

The Tri-Party Agency's effort to determine guidelines for future clean-up of the Inner Area of the Central Plateau is commendable and should result in future efficiencies. The HAB (Board) appreciates the opportunity to comment on these guidelines at a relatively early stage.

The HAB agrees that the approach to direct contamination remediation efforts will benefit from consistency. Coupled with consistency, though, must be a commitment to flexibility in order to tailor, when necessary, discrete remediation solutions for some Operable Unit conditions.

The HAB strongly disagrees with the 10 feet depth compliance guideline and also that of requiring remediation of highly contaminated areas deeper than 10 feet only when there is a risk management driver. These guidelines come from too broad of an assumption base that does not recognize the potential failure, and real, long-term costs, of Institutional Controls. The HAB believes the principals provided by DOE are grounded in an effort to minimize the amount of clean-up allowed under regulatory rules rather than on actual characterization that would quantify the true risk.

Additionally, the blanket application of these clean up criteria across all of the existing and future activities within the Inner Area of the Central Plateau could call into question seemingly presumptive assumptions about Central Plateau endstates when no endstate vision has been publicly vetted or formally codified through this "new lens" for approaching remediation. For example, the HAB has not examined the plausibility of dealing with the single shell tanks; dealing with past HLW tank leaks and remediation of the vadose zone; or addressed how HLW pipelines should be or should not be left in place. Old ponds - now sometimes under other waste sites - and miles of unlined and undocumented solid waste trenches are among a myriad of other, yet-to-be-determined, issues obligating consequential decisions for cleanup and closure of Operable Units within the Central Plateau.

The HAB advises the TPA Agencies to use the following guidelines to help develop regulatory and operational policy, practices and procedures for the Central Plateau cleanup and actions. An appendix is attached to further clarify our intent, for each guideline.

Central Plateau Inner Area Guidelines

1. The HAB advises DOE to do an evaluation of risk in the Central Plateau and the Inner Area that includes an Intruder Scenario and a Tribal Use Scenario. The Inner Area

Cleanup Guidelines should recognize and honor Treaty rights in decisions. The Baseline Risk assessment (BRA) does not include a tribal scenario. It is a fundamental obligation for DOE to meet their federal trust responsibilities. (appendix #1)

2. The HAB advises DOE to characterize prior to a Record of Decision (ROD). The HAB believes that having enough characterization data to support a final ROD prior to decisions is more appropriate than reliance on post-record of decision characterization (HAB advice #227). Establish criteria for waste characterization or risk assessment by utilizing the Central Plateau Remedial Action Values Flowchart (HAB advice #s 173/174) and the Groundwater Values Flowchart (HAB advice # 197). The Board does not support an analogous sites approach within the boundary of the Central Plateau. (appendix #2)
3. The HAB advises that predetermination of compliance cleanup depth is not reasonable without a better understanding of the type and quantity of the waste mass, coupled with an understanding of the unique surface, vadose zone and aquifer conditions of the Inner Area. Determine points of compliance after adequate characterization data are available to inform the compliance depth decision. DOE has not built a case to support changing compliance depths and the HAB does not support a change. In particular, we are considering the HLW pipes and trench outlet that are buried below the 15' depth, and the ponds, cribs and trenches of the Inner Area. (appendix #3)
4. The HAB does not support setting a conditional POC at the boundary of the Inner Area. This practice abrogates the responsibility of containment and protection of human health and the environment and defers it into the future. Allowing for disbursement of contamination, over time, throughout the Operable Unit brings into question the future ability to remediate. Additionally, the HAB advises reconsideration of the rooting depths of native vegetation to support resetting the point of compliance when determining depth¹. Lastly, the depth for setting the depth point of compliance should be calculated by starting at the bottom of fill. (appendix #4)
5. The HAB advises for use of the observational approach. The observational approach has stood us well at Hanford to remove near-surface masses of contamination (hot spots) which are encountered during remediation activities, and continue below the set Depth Point of Compliance. (appendix #5)
6. The HAB advises the use of a guideline, developed to require modeling the impacts of increased groundwater vadose zone flow and contaminant movement due to climate change by adding sensitivity analyzes that anticipate changes in the amount of precipitation and long-periodicity events, like the storm of the century. (appendix #6)
7. The HAB advises DOE and the Regulators to compare the costs of maintaining Institutional Controls and on-going sampling over the long periods of time forecasted, to the cost of Retrieve, Treat and Disposal of contaminants. (appendix #7)

8. The HAB advises that in undertaking cleanup to meet industrial cleanup standards, DOE should anticipate that these lands would be made available for industrial activities which would allow a continued human presence for future generations. The industrial level cleanup of the Inner Area needs to be protective of a continued human presence. (appendix #8)
9. The HAB advises that contamination in the deep vadose zone must be dealt with effectively so further contamination of the groundwater does not continue and contaminants in groundwater can be removed to meet drinking water standards. (appendix #9)
10. The HAB supports the approach to set cleanup values for ecological receptors as was done in the River Corridor. An industrial land use designation is acceptable to the HAB, but large pieces of undisturbed sagebrush-steppe habitat should be considered for protection to a higher standard, and possibly removed from the Inner Area land use. (appendix #10)
11. The HAB advises DOE that although a risk range of 1×10^{-4} to 1×10^{-6} is permissible, based on the requirements of MTCA and CERCLA regulations, the Board believes that radiological and non-radiological cancer risks should be combined and compared to the standard that Washington State has determined is protective of human health. This standard has an upper limit of lifetime risk for combined carcinogens of 1×10^{-5} . (appendix #11)
12. The HAB advises that DOE must approach the remediation of the Inner Area with an end-state vision of what the Inner Area Cleanup condition will be when cleanup is done, and what future uses for this area are envisioned, vetting this vision through meetings with the public and the HAB. (appendix #12)

ⁱ Dale to provide veg ref's