

April 30, 2012

RAP Handout
#1

5/8/12

Draft HAB Advice on the 300 Area Remedial Investigation/Feasibility Study (RI/FS) and Proposed Plan (DOE/RL-2010-97, Draft A)

Background

Final decisions about cleanup at Hanford's 300 Area are important because of their potential impacts to the Columbia River. The 300 Area Remedial Investigation and Feasibility Study (RI/FS) and Proposed Plan, along with the 100-K RI/FS, will provide a template for subsequent River Corridor and similar decisions to follow. It is important to the Hanford Advisory Board (HAB or Board) that these first River Corridor decision documents are protective, dependable, and well supported. After a review of the 300 Area RI/FS and Proposed Plan, the Board finds that these goals are not met.

For example, the Board finds that the basis for the decision used to select a preferred alternative in the 300 Area RI/FS is flawed. Portions of the River Corridor Baseline Risk Assessment (RCBRA), the Columbia River Component, additional groundwater data and risk assessment, plus other information were forwarded into the RI report that was approved by the Tri-Party Agreement (TPA) agencies. Specifically it is the Board's position that the risk assessment documents supporting the 300 Area Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process should be completed prior to the completion of the Proposed Plan and Record of Decision (ROD).

More critically, the Board has fundamental concerns with the proposed remediation technology and thus does not support the selection of Alternative 3. In previous advice, the Board has consistently advocated for the maximum use of remove, treat, and dispose (RTD) whenever possible, and especially near the river. Alternative 3 proposes very limited RTD, mostly of facility structures, with the bulk of soil uranium remediation relying on uranium sequestration technology.

The Board is concerned with a sole reliance on sequestration for soil uranium remediation in the 300 Area Proposed Plan, as that technology has been demonstrated to not be entirely successful in the near river environment, where the flux of varying river stage water affects the emplacement of polyphosphates. The processes of forming autunite minerals, by infiltrating the solution from the surface, or injecting the solution into the aquifer, have had very limited success. The Board believes the TPA agencies should opt for an alternative that combines focused RTD for contamination hot spots, and uranium sequestration in other less contaminated areas. The Board suggests that if sequestration can be demonstrated to work, that technology could possibly be used to capture uranium released by RTD activities, lowering the amount of uranium that could get to the river during operations.

Finally, the Board finds the 300 Area RI/FS and Proposed Plan documents to be confusing and unclear. Given their importance, greater transparency and rigor is needed in documenting the CERCLA process through the RI/FS to the Proposed Plan.

Advice

- The Board advises the TPA to consider making the current 300 Area RI/FS decision as an Interim Remedial Measure/Expedited Response Action until such time that this or some other technology can be tested and proven to be effective before proceeding to writing the final ROD.
- The Board advises the TPA agencies to consider the HAB's longstanding commitment to RTD values, especially to remove contaminants from near the river, when alternative selection is being made. The Board advises the TPA agencies to select an alternative that promotes a combination of focused RTD for contaminated hot spots, and to employ uranium sequestration only in other, less contaminated areas (as in Alternative 4).
- Because of the HAB's commitment and the Proposed Plan Alternative 3's reliance on uranium sequestration, the Board advises that Alternative 3, which contains only minor RTD, is not the best choice.
- The Board advises the TPA agencies to develop future RI/FS documents that adequately reflect a comprehensive risk assessment (following the CERCLA process) and that address cleanup levels based on Model Toxics Control Act (MTECA) Method B, or maximum concentration limits. The Board advises the TPA agencies that cleanup plans should be developed assuming reasonably foreseeable future scenario exposures for people other than industrial workers, and on contaminants of concern to which people, flora and fauna are exposed because of communication with Hanford ground water and riparian habitat.
- The Board advises the TPA agencies to finalize RI/FS documents, including all supporting documents, prior to the development of any Proposed Plan.
- The Board advises the TPA agencies to work to present RI/FS and supporting document information, including the data and details which support decisions, in a manner that is easy to read, concise, transparent, and readily accessible within the decision document.