



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
HANFORD/INL PROJECT OFFICE
309 Bradley Boulevard, Suite 115
Richland, Washington 99352

September 16, 2011

Susan Leckband
Chair, Hanford Advisory Board
713 Jadwin, Suite 4
Richland, Washington 99352

Re: EPA Response to Hanford Advisory Board Advice # 246, "River Corridor Baseline Risk Assessment"

Dear Ms. Leckband: *Susan*

The U.S. Environmental Protection Agency appreciates the effort the Hanford Advisory Board has put into review of the River Corridor Baseline Risk Assessment and for their advice to the Tri-Parties (U.S. Department of Energy, Washington State Department of Ecology and EPA). The EPA provided comments on Draft C of the Human Health RCBRA document that the HAB reviewed, and EPA's comments are in the Administrative Record, document # 0093677. Several of the HAB's advice points are included in EPA's comment letter.

The EPA shares the Board's concern about using the existing RCBRA for calculating risk in upcoming decisions. The approach used in the RCBRA to calculate risk to large areas and waste sites within these large areas, using generic methods, has led to risk conclusions that for many waste sites are different than risk conclusions in site-specific cleanup verification documents. The site-specific cleanup verification documents contain more specific information about the site history and contamination that is used in the site-specific risk calculation. The EPA intends to use the full set of information for each waste site and area in our decisions for final cleanup actions for the river corridor.

We appreciate the Board advising DOE to follow EPA risk assessment guidelines. The EPA risk assessment methods strive to achieve a conservative and realistic analysis that supports protective cleanup decisions.

The EPA understands that each component of the cleanup is in the context of the entire cleanup project. The HAB advice mentions the Tank Closure and Waste Management Environmental Impact Statement. We know this evaluation and disclosure document has a large scope, including the tanks and tank leaks--except the scope is truncated when contamination reaches the groundwater. The EIS explains its scope within the broader cleanup effort, including CERCLA cleanup areas and groundwater remediation. The RCBRA scope was also limited to current contaminant conditions in the river corridor. The current condition includes contaminants that have already moved into the river corridor, but not future contaminants. The RCBRA was intended to support cleanup decisions of waste sites in the river corridor. There is already contamination from the 200 Area in the river corridor and more contamination that will arrive in the future. 200 Area projects, such as 200-PO-1 groundwater operable unit, evaluate appropriate cleanup actions for the contaminated plumes from the source to the river. The EPA plans to

have the river corridor cleanup decisions plus the 200 Area cleanup decisions address the entire past practice cleanup task at Hanford. The goal of the cleanup is to have all projects be protective at the Hanford-wide and each of the individual decisions to be protective at the operable unit level.

The RCBRA included groundwater in the risk assessment, and often protection of groundwater to drinking water standards is the controlling requirement in selecting a cleanup action. The RCBRA, already a complex set of documents presenting current contaminant conditions, did not include modeling or other projections into the future. Future projections are expected to be available in the feasibility study for each operable unit.

We appreciate the Board's understanding that arsenic poses a particular risk assessment challenge. Natural background arsenic, pre Hanford nuclear reservation agriculture arsenic use, and Hanford nuclear reservation discharges of arsenic will be addressed in cleanup decisions.

EPA welcomes the Board's offer of assistance in risk communication. The risk calculation process can be very complex, but risk communication should not be. If you have questions regarding this letter or the RCBRA, please contact Larry Gadbois at 509-376-9884 or gadbois.larry@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Dennis Faulk". The signature is fluid and cursive, with a large initial "D" and "F".

Dennis Faulk, Program Manager
Hanford Project Office

cc: Jane Hedges, Ecology
Joe Franco, DOE