## HANFORD ADVISORY BOARD

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Shirley Olinger, Manager U.S. Department of Energy, Office of River Protection P.O. Box 450 (H6-60) Richland, WA 99352

Jane Hedges, Program Manager Washington State Department of Ecology 3100 Port of Benton Blvd. Richland, WA 99354

Re: Tank Waste System Plan Revision 4 and Planning Assumptions for Revision 5

Dear Ms. Olinger and Ms. Hedges,

## Background

Safe tank waste retrieval, treatment and immobilization are among the Hanford Advisory Board's (Board) highest cleanup priorities.

The U.S. Department of Energy (DOE), responding to advice from the Board, has worked diligently to create and refine a detailed System Plan for the River Protection Project. DOE is now working to Revision 4 of the plan, developing Revision 5, and beginning work toward Revision 6. The Board believes that System Plan Revision 4 shows significant organizational and written improvement over Revision 3.

The System Plan is a living document detailing the complex interactions between operations of the Waste Treatment Plant (WTP) and tank waste retrieval, and sequencing of waste retrieval modeled after a specific systems plan and analytical model of its own (currently the Hanford Tank Waste Operations Simulator). The System Plan relies on a number of key assumptions and assesses a range of potential vulnerabilities.

The Board appreciates the work done by DOE, the Environmental Protection Agency, and the Washington State Department of Ecology (Ecology) to finalize the Tri-Party Agreement and Consent Order change package to include regular updates to the River Protection Project System Plan (M-62-40) and the related new milestone (M-36-01) for the Hanford Lifecycle Scope, Schedule and Cost Report (Lifecycle Report). DOE has included annual

updates to the System Plan as contract deliverables under the Tank Operations Contract. The actions to create these important planning documents are consistent with Advice #192, #203, and #209.

The Board appreciates the scope and content of Revision 4, particularly regarding Technology Development (Section 6), and Key Issues and Uncertainties (Section 7). These sections provide insight into needed adjustments and opportunities for improvements in the plan. The Board affirms the merit of the planning assumption in Revision 5 that supplemental Low Activity Waste (LAW) treatment capacity will be provided by a second LAW vitrification facility, located in 200 East Area adjacent to the WTP and based on the same technical assumptions as the WTP LAW Vitrification Facility.

## Advice

- Future annual revisions of the System Plan should include the Baseline Case and appropriate alternative cases such as those mentioned in DOE's response to Advice #209.
- Future revisions of the System Plan should continue to ensure, as does Revision 4 of the System Plan, which key risks (particularly those to health, safety and the environment) have solid and realistic risk mitigation options identified and included. The revisions should place a priority on dealing with mobile contaminants that drive long-term health, safety and environmental risks (e.g., uranium, iodine and technetium). Options for technetium removal and incorporation into an immobilized high-level waste form should be given priority and adequate analysis to support future decision-making.
- DOE should ensure that the System Plan revisions and the Lifecycle Report revisions are consistent with each other by using the same verified assumptions, uncertainties, and analysis for the common cases.
- The Board supports the planning assumptions in Revision 5 that the Effluent Treatment Facility, Liquid Effluent Retention Facility, and other facilities will be upgraded as needed to support the waste treatment mission and are assumed to be available when needed. Best estimates of the design, scope, schedule, and costs of required facility upgrades and new facilities should be included in future revisions of the System Plan and/or Lifecycle Report.

Sincerely,

Susan Lekhand

Susan Leckband, Chair Hanford Advisory Board

This advice represents Board consensus for this specific topic. It should not be taken out of context to extrapolate Board agreement on other subject matters.

cc: David Brockman, Manger, U. S. Department of Energy, Richland Operations Shirley Olinger, Manager, U. S. Department of Energy, Office of River Protection Steve Pfaff, Co-Deputy Designated Official, U.S. Department of Energy, Office of River Protection Doug Shoop, Co-Deputy Designated Official, U.S. Department of Energy, Richland Operations Office Dennis Faulk, U. S. Environmental Protection Agency Jane Hedges, Washington State Department of Ecology Catherine Brennan, U.S. Department of Energy, Headquarters The Oregon and Washington Delegations