



**Department of Energy**  
Richland Operations Office  
P.O. Box 550  
Richland, Washington 99352

05-AMCP-0382

**SEP 9 2005**

Mr. Todd Martin, Chair  
Hanford Advisory Board  
1933 Jadwin, Suite 135  
Richland, Washington 99352

Dear Mr. Martin:

**HANFORD ADVISORY BOARD (HAB) CONSENSUS ADVICE NO. 177, 200-UW-1  
WASTE SITES PROPOSED PLAN**

Thank you for the HAB's letter of advice on the Comprehensive Environmental Response, Compensation and Liability Act Proposed Plan for the 200-UW-1 Operable Unit, DOE/RL-2003-24. The U.S. Department of Energy, Richland Operations Office (RL) appreciates the continuous interactions it had with the River and Plateau Committee throughout the development of this Plan. Based on the committee's feedback, DOE attempted to address many of the issues and concerns the committee raised and will explore ways to more clearly and meaningfully communicate technical information in future documents.

Below are RL's specific responses to your advice.

1. The Tri-Parties are currently discussing how to best integrate Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) requirements in a cost effective, non-redundant manner. Based upon preliminary discussions and guidance outlined in the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) and other supportive documents, DOE believes it would be premature to consolidate the 31 U Plant Area waste sites under one blanket RCRA permit.
2. DOE has analyzed the limited excavation with placement of a surface barrier alternative. This cleanup remedy works for small waste sites with shallow contamination (less than 15 feet below ground surface) that have long-lived radioisotopes and/or chemical contamination that pose a risk through direct contact to humans (including intruders) or biological uptake, combined with deeper contamination that is a threat to groundwater. The 200-UW-1 Operable Unit waste sites do not have those attributes. The contamination in those waste sites is generally deeper than 15 feet below ground surface and the shallow contamination that does exist is predominantly short-lived radioisotopes (i.e., less than 150 years). DOE believes the preferred alternative (i.e., engineered barrier) identified in the Proposed Plan is most protective of human health and the environment and there is no need to re-issue the

**Proposed Plan.** Limited excavation does have potential issues associated with this approach including the following: additional worker exposure; disturbed backfill soil will attract moisture thereby making the barrier less effective; added barrier source material requirements; and additional costs.

3. The Proposed Plan does not assume the application of barriers from the Canyon Disposition Initiative (CDI) Record of Decision (ROD), but indicates that this is a likely outcome in the next 10 to 20 years. DOE has taken into consideration this future remedy as part of the waste sites remedial action process. The four waste sites (UPR-200-W-78, UPR-200-W-118, and the 216-U-4 Reverse Well/216-U-4A French drain) that would lie under the CDI barrier also have monitored natural attenuation as their preferred alternative. Until such time as the CDI barrier is constructed, these waste sites will be evaluated every five years (i.e., CERCLA Five-Year ROD review) to determine if the preferred alternative continued to be protective of human health and the environment, or if additional remedial action is required.
4. Table F-1 (pages F-16/F-17) includes undiscounted total capital costs, and undiscounted ("Total") operations and maintenance costs for Alternatives 2 and 4, so that their life-cycle costs can be compared with the life-cycle costs of Alternative 3.
5. The Focused Feasibility Study (page D-5 as well as figures D-7 through D-12 [pp. D-25-D-30]) included sensitivities in the fate and transport modeling for uranium through the use of a  $K_d = 0.6$  and 3.
6. The plug-in approach discussed in the Proposed Plan is similar to the approach being implemented in the 100 Areas. The Sampling and Analysis Plans and decision documents will define the data required to confirm the plug-in approach. It is anticipated that the level of additional future field characterization of the 200-UW-1 waste sites will depend on the remedy being "plugged-in." For example, some waste sites may require future field characterization (using the observational approach) when the proposed remedy is remove, treat and dispose.
7. The excavation and contaminant distribution models both have different objectives, therefore, each respective model is different yet valid for their specific objectives. However, they are consistent in that they both use conservative assumptions that bound parameters to evaluate remedy alternatives and they are protective of human health and the environment. The excavation model provides an estimate of the upper bound of possible exposure to workers while the contaminant distribution model provides an estimate of the maximum lateral extent of contaminant distribution which will be used for surface barrier design.

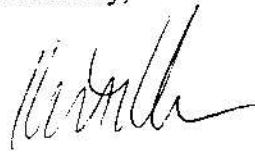
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If you have any questions, please contact me, or your staff may contact Matt McCormick, Assistant Manager for the Central Plateau, on (509) 373-9971.

Sincerely,

A handwritten signature in black ink, appearing to read "Keith A. Klein". The signature is fluid and cursive, with a long horizontal stroke at the end.

Keith A. Klein  
Manager

AMCP:KDL

cc: See page 4

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cc: G. Bohnee, NPT  
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