



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

1315 W. 4th Avenue • Kennewick, Washington 99336-6018 • (509) 735-7581

November 25, 1997

Mr. Owen C. Robertson  
U.S. Department of Energy  
P.O. Box 550, MSIN: H0-12  
Richland, WA 99352



Dear Mr. Robertson:

Re: Closure of 100-D Ponds

In response to the U.S. Department of Energy's (USDOE) letter, dated September 30, 1997, and as a result of our meeting on November 19, 1997, the Washington State Department of Ecology (Ecology) has conducted an analysis of the technical merits of the 100-D Ponds equivalency demonstration. This analysis included reviewing the modeling done for the equivalency demonstration, the characterization and ground water monitoring data to date, the site specific conditions, and the remedial actions at nearby Comprehensive Environment Response, Compensation, and Liability Act and Resource Conservation and Recovery Act past practice sites.

As a result of this analysis, Ecology has concluded that the data from the two previous characterization efforts, specifically the test pits, determined the vertical extent of contamination. Ecology has also determined the analytical modeling effort done for the equivalency demonstration, in conjunction with the characterization and ground water monitoring data, to be valid and verifiable. Ecology's analysis of the original conceptual model in the *Groundwater Impact Assessment Report for the 100-D Ponds* (WHC-EP-0666) found this model to be purely qualitative and in need of updating with currently available site information. The USDOE's voluntary removal action and subsequent confirmatory sampling data also contributes to the validity of the analytical model and to the discredit of the original conceptual model.

Ecology agrees with the USDOE's conclusion that the collection of additional samples from the vadose zone is not warranted in the case of 100-D Ponds. Therefore, Ecology concurs that 100-D Ponds may be clean closed. Post-closure monitoring would not be required if clean closure were achieved, eliminating the need for an equivalency demonstration. Ecology expects USDOE to document a strategy for clean closure in the revised closure plan. Ecology requests that

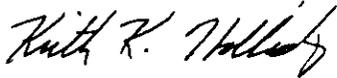
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USDOE include the equivalency demonstration document as an appendix and change the document's title to *Demonstration of Compliance with Clean Closure Standards*. Ecology requires section 2.0 Regulatory Background of this appendix be either deleted or rewritten to address the comments in Ecology's letter dated July 24, 1997. Ecology also requests that the original conceptual model be updated with current site information and upgraded to the analytical model used for the equivalency demonstration through a letter report to Ecology and the 100-D Ponds administrative record.

If you have any questions or need clarification on any of Ecology's comments, please feel free to contact me at (509) 736-3036.

Sincerely,



Keith K. Holliday, 100-D Area Project Manager  
Nuclear Waste Program

KH:ch

cc: Glenn Goldberg, USDOE  
Doug Sherwood, EPA  
Jeff James, BHI  
Scott Petersen, CHI  
Administrative Record: 100-D Ponds