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STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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August 15, 2000

Mr. K. Michael Thompson
U. S. Department of Energy
Richland Operations Office
P.O. Box 550, MSIN: A5-13
Richland, Washington 99352

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EDMC

Dear Mr. Thompson:

Re: M-24-00 Borehole Characterization and Waste Management

A table identifying Tri-Party Agreement (TPA) Milestone M-24-00L/M borehole characterization workscope was transmitted electronically to the Washington State Department of Ecology (Ecology) on July 28, 2000. Upon review of the workscope, it is Ecology's understanding that sampling of the aquifer at seven boreholes to a depth of one hundred feet below the water table has been removed from the borehole characterization workscope. Ecology considers aquifer profiling to be of particular importance, as it provides valid data regarding the vertical distribution of waste constituents (i.e., radionuclides, metals, anions, etc.). At S-SX, T, and TX-TY Tank Farms, this type of sampling (although limited in scope) has indicated that tank waste contaminants are more deeply distributed in the aquifer than previously thought. An understanding of the vertical distribution of contamination is necessary to adequately design permanent groundwater monitoring well systems capable of monitoring appropriate/specific groundwater intervals over the vertical extent of the aquifer. This information/understanding currently does not exist. Ecology has repeatedly expressed the need to characterize the aquifer at depth and is concerned that those needs may not be fulfilled. Because the groundwater monitoring wells are being installed at three tank farms undergoing assessment monitoring and corrective action (due to releases and impacts to groundwater), the characterization activities must be sufficient to satisfy regulatory requirements (i.e., groundwater assessment monitoring). Since no alternative sampling strategy has been proposed or budgeted for by the U.S. Department of Energy (USDOE), Ecology is concerned that the USDOE will miss an excellent opportunity to obtain valid and cost effective data as the wells are drilled.

Ecology has received and reviewed a document entitled "Site Specific Waste Management Instruction RCRA Well Drilling and Sampling". The document describes how the TPA Milestone M-24-00L/M well drilling wastes will be managed. It is Ecology's understanding that well installation, borehole characterization, and waste management share the same funding source. As such, it is also Ecology's understanding that in the case that waste management costs are high, monies available for characterization are negatively impacted. For this reason, Ecology requests assurances from the USDOE and contractors that all viable waste management options have been considered and evaluated. It is noted that the waste management instruction does not include provisions for pursuing certain alternatives for managing well installation wastes.

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Ecology has repeatedly communicated several waste management options and encouraged the USDOE and contractors to evaluate them in the context of managing TPA Milestone M-24-00L/M well drilling waste. In particular, Ecology requests that the USDOE and contractors evaluate application of the hazardous waste debris rule to secondary waste streams consisting of paper, cloth, plastic, rubber, personnel protective equipment, etc. (e.g., waste streams W10 and W12). A description of this application may be found in: *Guidance for Clean Closure of Dangerous Waste Facilities* (Ecology Publication #94-111, August 1994). Similarly, Ecology requests that the USDOE and contractors evaluate pursuit of a "contained-in determination" for waste streams consisting of geologic materials which have come into contact with groundwater (e.g., waste streams W11 and W13). A description of this application may also be found in the above referenced publication. (Note: a successful contained-in determination removes waste from RCRA regulation.)

The USDOE has informed Ecology that certain waste management costs that are negatively impacting M-24-00L/M borehole characterization are a function of the way the USDOE and contractors programmatically fund waste management activities - specifically, operating costs of the Environmental Restoration Disposal Facility versus the Central Waste Complex and the Mixed Waste Trenches. Furthermore, in comparing these two management and disposal pathways, there are no significant differences in actual waste management. In order to achieve the above described borehole characterization for TPA Milestone M-24-00L/M wells, the USDOE should take prompt action to either remove the artificial subsidization of waste management/disposal costs or to pursue the alternative waste management options described above.

Due to the time constraints imposed by current drilling operations and waste generation, Ecology proposes regularly scheduled workshops be initiated immediately to facilitate implementation of all available waste management efficiencies. If you have any questions about this request, please call Alisa Huckaby at (509) 736-3034.

Sincerely,



Jane Hedges
Cleanup Section Manager
Nuclear Waste Program

JH:sl:adh:lkd

cc: Doug Sherwood, EPA
Wade Ballard, THE USDOE-RL
Beth Bilson, THE USDOE-RL
Marvin Furman, THE USDOE-RL
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Administrative Record: T and TX-TY Tank Farms