



STATE OF WASHINGTON  
 DEPARTMENT OF ECOLOGY  
 3100 Port of Benton Blvd • Richland, WA 99352 • (509) 372-7950

January 16, 2007

Mr. Roy J. Schepens, Manager  
 Office of River Protection  
 United States Department of Energy  
 P.O. Box 450, MSIN: H6-60  
 Richland, Washington 99352

**RECEIVED**  
 JAN 30 2007  
**EDMC**

Re: *Tank Farm Vadose Zone Contamination Volume Estimates*, RPP-23405, Rev. 2 Path  
 Forward

References:

1. Letter 06-TPD-059, from R. J. Schepens, USDOE-ORP, to J. A. Hedges, Ecology, *Process for Reaching Agreement on Tank Farm Vadose Zone Leak Loss Estimates*, dated August 18, 2006, with attachment.
2. DOE/ORP-2005-01, *Initial Single-Shell Tank System Performance Assessment for the Hanford Site*, Rev. 0, released April 2006.

Dear Mr. Schepens:

The Department of Ecology has received the letter of Reference 1. We appreciate the willingness of the United States Department of Energy-Office of River Protection (USDOE-ORP) to reach agreement on a process to update tank farm leak volume estimates. During our meeting on September 13, 2006, Ecology agreed to work with USDOE-ORP to develop a protocol document. Revision 2 of the *Tank Farm Vadose Zone Contamination Volume Estimates* (Leak Loss Report) identifies this agreement. It clarifies that further revisions of the Leak Loss Report would be released in accordance with this protocol document. We recently began meeting with your contractor to complete this protocol document, and are confident that this collaboration will be productive.

Our agreement on the estimates of tank farm leak volumes, soil inventories and their uncertainties is necessary for the following reasons:

- This process is a key step in the long term characterization efforts that will establish "...the amount or extent of contaminated materials . . . spilled and discharged into the environment" as identified by Washington Administration Code (WAC) 173-303-145 (3, a, ii).

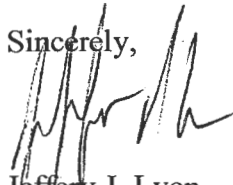
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- These estimates are necessary information for use in the closure plan, WAC 173-303-610(3)(a)(v) (as applicable under Tri-Party Agreement [TPA] Milestone M-45-00).
- These estimates are used as part of the planning in the Resource Conservation Recovery Act Facility Investigation/Corrective Measures Study soil characterization work (TPA Milestone M-45-55, 58, 60) and the development of interim measures (milestone M-45-56, 59).
- The estimates are an integral part of the Initial Single-Shell Tank (SST) System Performance Assessment (PA), Reference 2, and will be used to develop the Tank System Closure Plan. The initial SST PA demonstrates that risk to groundwater is controlled by past releases to soil from the SSTs, which underscores the need for technically defensible data.
- The complexity of tank farm remediation will require the use of these estimates for an extended period of time.
- Understanding the uncertainties is essential to assure that decision makers and the public are making informed decisions with some confidence and with technically defensible data.

We expect the protocol document will establish a rigorous, technically based process for estimating past and future tank farm soil inventory from leaks associated with the tank farms. Ecology would like to focus the initial review on the leak volumes and contaminant inventory determinations for the tank leaks that are different from those reported in HNF-EP-0182, the *Monthly Waste Tank Summary Report*. The remainder of the SSTs will need to be reviewed and assessed according to the protocol document, in a timely and prompt manner.

We would like to complete the development of the protocol document by March 31, 2007. If you have any questions, contact me at 509-372-7914.

Sincerely,



Jeffery J. Lyon  
Tank Waste Storage Project Manager  
Nuclear Waste Program

LAF:ada

cc: See page 3

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cc: Dave Bartus, EPA  
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