



July 20, 2007

Briant Charboneau  
U.S. Department of Energy  
Richland Operations Office  
PO Box 550  
Richland, Washington 99352

Re: TW-1/2/PW-5 Remedial Investigation Report (DOE/RL-2002-42, Rev. 0, Remedial Investigation Report for the 200-TW-1 and 200-TW-2 Operable Units [Includes the 200-PW-5 Operable Unit])

Dear Mr. Charboneau:

The above-referenced Remedial Investigation Report has been provisionally approved by the U.S. Environmental Protection Agency (EPA) and the Washington State Department of Ecology (Ecology) by letter (C. Cameron and J. Price to B. Foley, Provisional Approval of the 200-TW-1/2/PW-5 OU Remedial Investigation Report and Required Improvements to Vadose Zone Modeling for 200-TW-1 and Other 200 Area Operable Units, dated February 18, 2004). The letter included a number of stipulations (Enclosure 1).

The stipulations in the letter have been superseded by the TPA Change Requests M-13-06-01 and M-15-06-02. The former committed the U.S. Department of Energy (DOE) to submit a sampling and analysis plan to collect supplemental data. The latter committed DOE to use the supplemental data in supplemental analyses, including feasibility studies for the 200-TW-1/200-PW-5 and 200-TW-2 operable units (M-015-42D and M-015-42E interim milestones, respectively). Ecology and EPA agree that DOE should not revise the remedial investigation report to address the stipulations, but rather address them in the feasibility reports.

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A copy of this correspondence or a description of the above-referenced explanation should be attached to the Remedial Investigation Report in the Administrative Record. If you have any questions, please contact John Price at (509) 372-7921 or Rod Lobos at (509) 376-3749.

Sincerely,

*Belma M. Jackson*

John B. Price  
Project Manager

Environmental Restoration Project

*for  
John B. Price*



Rod Lobos  
Project Manager

Enclosure:

cc: Admin. Record (200-TW-1, -2, and 200-PW-5)

Enclosure 1

Stipulations in the provisional approval letter<sup>A</sup>  
are:

1. The U.S. Department of Energy (DOE) must perform additional modeling of the 216-T-26 Crib by applying USGS recommendations to the satisfaction of the EPA and Ecology.
  - A. Apply a Monte Carlo approach to investigate the sensitivity of the breakthrough curves to parameter uncertainty for the 216-T-26 crib and at least one other site. The System Assessment Capability people may have some helpful advice on such Monte Carlo simulations.
  - B. Assume hydraulic conductivity is isotropic and model as such, unless well-supported guidelines for estimating anisotropic parameters are identified.
  - C. If the model indicates that dipping beds divert recharge flux, enlarge the solution domain enough that the source areas for recharge through the waste sites are included in the solution domain.
  - D. Consider the hypothesis that if Tc-99 and tritium profiles simulated using a  $K_d = 0$  are not well matched by field data, the reason may be that the water flow has not been accurately simulated by the model. Modify the model and/or parameters until a good match has been found using  $K_d = 0$  for Tc-99 and tritium.
  - E. Include in the modeling report, comparisons made between the 216-T-26 site where core sample information was the basis for modeling versus other sites where inventory and volume disposed played a larger role in the setup of the model. The original modeler indicated that the comparisons were favorable.
  - F. The DOE is strongly advised to gain a better understanding of large-scale hysteretic parameters and develop a means of addressing them using the STOMP code to refine future modeling efforts.
2. The Tri-Parties (DOE, Ecology, EPA) will investigate the need for further modeling of sites within this OU group and within other OUs where modeling has been performed to determine delivery of contaminants through the vadose zone and predicted resulting concentrations in groundwater.
3. Additional modeling will be performed on any sites selected through the screening described in #2 above.
4. Any significant changes in the fate and transport will be used as inputs into remedy selection for each site modeled and similar or analogous sites.

<sup>A</sup>Letter, C. Cameron and J. Price to B. Foley, Provisional Approval of the 200-TW-1/2/PW-5 OU Remedial Investigation Report and Required Improvements to Vadose Zone Modeling for 200-TW-1 and Other 200 Area Operable Units, dated February 18, 2004

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