



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

DEC 05 2017

18-AMRP-0023

Ms. Alexandra K. Smith, Program Manager
Nuclear Waste Program
Washington State Department of Ecology
3100 Port of Benton Boulevard
Richland, Washington 99354

Dear Ms. Smith:

**CONTINUED RESPONSE ACTIONS AT THE PUREX STORAGE TUNNELS –
COMPLETION OF TUNNEL 1 STABILIZATION AND PATH FORWARD FOR TUNNEL 2**

The purpose of this letter is to update the Washington State Department of Ecology (Ecology) of the U.S. Department of Energy Richland Operations Office (RL) continued response actions at the PUREX storage tunnels. In accordance with plans documented in previous correspondence (17-AMRP-0180) and supported by Ecology (17-NWP-069), RL has completed actions to void fill Tunnel 1 with grout. More than 4,400 cubic yards of engineered grout were placed in Tunnel 1 to complete the stabilization action between October 3, 2017, and November 11, 2017. RL used cameras in the tunnel throughout the operation to ensure that the grout reached the ends of the tunnel and that all of the equipment was covered. Completion of this response action stabilizes Tunnel 1, and allows the continued safe storage of the materials as an interim measure until future cleanup decisions have been reached.

A structural integrity evaluation submitted to Ecology in June 2017 (17-AMRP-0201) identified that the potential risk of localized collapse of PUREX Storage Tunnel 2 is high, due to overstressed structural support members and connections. RL intends to address this risk by filling Tunnel 2 with engineered grout as part of continuing response actions, consistent with Section J.4.5 of the PUREX Tunnels Contingency Plan. This response action will provide interim stabilization of Tunnel 2, will help to mitigate potential threats to human health and the environment, and will not preclude future remedial or final closure actions. Stabilization of Tunnel 2 is anticipated to begin before the end of Fiscal Year 2018, allowing for incorporation of lessons learned from Tunnel 1, development of work controls and design, and seasonal considerations for grout placement. In the meantime, enhanced monitoring of the exterior of Tunnel 2 will be conducted daily using video surveillance equipment.

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RL appreciates the collaboration with Ecology on the response actions for Tunnel 1 and is fully committed to work with Ecology on the Tunnel 2 response actions. RL believes this collaborative effort is best for the protection of the workers, the public, and the environment.

If you have any questions, please contact me, or your staff may contact Joe Franco, Assistant Manager for the River and Plateau, on (509) 373-9971.

Sincerely,



Doug S. Shoop
Manager

AMRP:DBC

cc: J. Bell, NPT
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Administrative Record (PUREX Tunnels 1 and 2, S-2-1)
Environmental Portal