



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

18-AMRP-0145

AUG 0 2 2018

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:

**ADDITIONAL INFORMATION TO SUPPORT REQUEST FOR TEMPORARY
AUTHORIZATION TO IMPLEMENT THE CLASS 3 PERMIT MODIFICATION REQUEST
FOR THE PUREX STORAGE TUNNELS CLOSURE UNIT GROUP 19 TO ALLOW
INTERIM CLOSURE ACTIVITIES FOR PUREX STORAGE TUNNEL 2**

In response to your July 23, 2018, request for additional information to support approval of the U.S. Department of Energy (DOE) Richland Operations Office (RL) request for Temporary Authorization (TA) to begin stabilizing PUREX Storage Tunnel 2 with grout, please find the attached PUREX Tunnel 2 Visual Inspection Results, CHPRC-03811, Revision 0 Draft, which is based on visual examinations completed during the spring of this year. Consistent with the engineering evaluation completed in 2017, the visual examinations show severe degradation of the tunnel support structure in the south end of the tunnel and further supports the conclusion that PUREX Storage Tunnel 2 remains at a potential high risk of localized collapse. Corrosion has resulted in degradation of several elements of the structure, but most significantly to the support bolts, nuts, and washers that hold the longitudinal metal beams in place in the roof of the tunnel. Failure of these components could result in a different and more significant mode of failure than PUREX Storage Tunnel 1, possibly breaching the highly radiologically-contaminated equipment in PUREX Storage Tunnel 2 and potentially releasing contamination to the environment.

The CH2M HILL Plateau Remediation Company currently has approved work processes and subcontracts in place to begin stabilizing PUREX Storage Tunnel 2 with grout beginning August 20, 2018. Stabilization of PUREX Storage Tunnel 2 with grout is consistent with the recommendation of the DOE Expert Panel and does not preclude future Comprehensive Environmental Response, Compensation, and Liability Act/Resource Conservation and Recovery Act remedial actions, similar to PUREX Storage Tunnel 1. PUREX Storage Tunnel 2 stabilization activities are paused until such time that RL receives the requested TA from the

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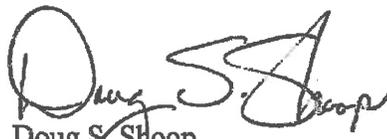
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Washington State Department of Ecology (Ecology). As a minimum, RL requests authorization to begin installing the equipment necessary to stabilize PUREX Storage Tunnel 2 by August 13, 2018, and authorization to begin stabilizing PUREX Storage Tunnel 2 with grout on September 6, 2018. Ecology's timely authorization to proceed will reduce risk to the workers, public, and environment, avoid potential long-term impacts to site operations and other cleanup activities, avoid potential weather delays, and will enable the most effective and efficient use of available funding given the uncertainty in the Fiscal Year 2019 appropriations process.

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:OAF

Attachment:
PUREX Tunnel 2 Visual Inspection
Results, CHPRC-03811, Revision 0 Draft

cc w/attach:

D. B. Bartus, EPA
J. Bell, NPT
R. Buck, Wanapum
L. J. Cusack, CHPRC
S. L. Dahl-Crumpler, Ecology
D. R. Einan, EPA
M. N. Jaraysi, CHPRC
M. Johnson, CTUIR
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D. Rowland, YN
S. N. Schleif, Ecology
D. G. Singleton, CHPRC
B. L. Weese, Ecology
Administrative Record (TSD: S-2-1)
Ecology NWP Library
Environmental Portal
HF Operating Record (J. K. Perry, MSA)