



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

SEP 24 2015

15-AMRP-0291

Mr. K. Niles, Administrator  
Nuclear Safety Division  
Oregon Department of Energy  
625 Marion Street Northeast, Suite 1  
Salem, Oregon 97301

Dear Mr. Niles:

TREATABILITY TEST PLAN FOR THE 200-BP-5 GROUNDWATER OPERABLE UNIT, DOE/RL 2010 74, REVISION 2, DRAFT A, GROUNDWATER SAMPLING AND ANALYSIS PLAN FOR THE 200-BP-5 GROUNDWATER OPERABLE UNIT, DOE/RL-2014-33, DRAFT A, AND ENGINEERING EVALUATION/COST ANALYSIS FOR 200-BP-5 OPERABLE UNIT GROUNDWATER EXTRACTION, DOE/RL-2015-26, DRAFT A

This responds to your letter of June 29, 2015, that provides comments on the subject documents. The U.S. Department of Energy Richland Operations Office (RL) would like to thank the State of Oregon Department of Energy (ODOE) for their comments and support for a near-term remedial action at the 200-BP-5 Groundwater Operable Unit.

With respect to performing the treatability test within a thin aquifer, the local aquifer materials consists of highly transmissive sediments that are expected to accommodate pumping rates of up to 150 gallons per minute without substantial draw down, as discussed in Section 4.2 of the Plan, and illustrated in Figure 4.3. Initial calculations and pumping of wells during well development predicts only a few centimeters of drawdown. Performing the test will provide that data needed to further assess the feasibility of performing a pump and treat removal action and the need for returning treated water. The test will also provide information on the need to re-inject water as part of any long term groundwater pump and treat strategy.

With regard to the contaminant list in the Sampling and Analysis Plan (SAP), RL will update the SAP, as needed, to be consistent with the results of the Remedial Investigation Report for the 200-BP-5 Operable Unit. The Draft A Remedial Investigation Report was recently drafted and sent to the regulators for review this month. Following the comment resolution process for the Remedial Investigation Report, the contaminant list in the SAP will be updated accordingly.

The contaminant list in the 200-BP-5 Treatability Test Plan is designed to evaluate the effectiveness of the pump and treat technology for removing uranium and technetium-99 as well as co-contaminants iodine-129, cyanide, and nitrate in the B Complex Area (Appendix A Table A-1 of the Plan). The 200 West Pump and Treatment Facility is capable of treating a wide range of contaminants using ion-exchange, biological, and air stripping technologies, and has the

SEP 24 2015

capability of addressing these particular contaminants. As part of the planning process for the test, the local groundwater monitoring record was evaluated to confirm that the treatment process was sufficient to address all groundwater constituents in the area of the extraction well (Characterization Data for New Waste Streams [200-UP-1, 200-BP-5, and Perched Water] for the 200 West Pump and Treat Facility, SGW-57790, Revision 1). A very comprehensive analysis of treated water is also performed at the 200 West Pump and Treatment Facility to ensure compliance (200 West Pump and Treat Operations and Maintenance Plan, DOE/RL-2009-124).

In addition to the near term goal of implementing a groundwater removal action at B-Complex, RL has initiated the preparation of a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Feasibility Study for both the 200-BP-5 and 200-PO-1 Groundwater Operable Units that will assess remediation alternatives for all groundwater contamination within the Operable Units in support of a CERCLA Record of Decision. The Draft A Feasibility Study and Proposed Plan is expected to be completed by September 30, 2016. RL is also conducting a source removal action in the B Complex Area under the 200-DV-1 Operable Unit that removes uranium and technetium contamination from the deep vadose before it can reach groundwater. RL will continue to update stakeholders, including ODOE, as these interim actions and CERCLA process proceeds.

If you have any questions, please contact me, or your staff may contact Mike Cline, of my staff, on (509) 376-6070.

Sincerely,



Ray J. Corey, Assistant Manager  
for the River and Plateau

AMRP:JGM

cc: J. V. Borghese, CHPRC  
D. Engstrom, ODOE  
D. A. Faulk, EPA  
J. A. Hedges, Ecology  
R. A. Lobos, EPA  
N. M. Menard, Ecology  
C. P. Noonan, MSA  
R. E. Piippo, MSA  
M. J. Turner, MSA  
C. D. Wittreich, CHPRC  
Administrative Record  
Environmental Portal  
Oregon Hanford Cleanup Board