



**The Secretary of Energy**  
Washington, D.C. 20585

January 14, 2013

The Honorable Christine Gregoire  
Governor of Washington  
Olympia, Washington 98504

Dear Governor Gregoire:

Thank you for your continued engagement regarding the cleanup of the Hanford site. As you know, several months ago, I assembled some of the nation's brightest individuals to review the Waste Treatment and Immobilization Plant (WTP) project technical issues and Hanford tank waste treatment strategies. This was a comprehensive review that was informed by and built upon previous expert reviews, taking into account new information and thus providing additional focus to ensure the WTP will operate reliably for its design life. Furthermore, the review has identified opportunities to increase the flexibility and reliability of the Hanford tank waste treatment system. For example, the Department is engaged in a serious and expeditious evaluation of the option to provide direct waste feed to the Low-Activity Waste (LAW) and High-Level Waste (HLW) facilities independent of the Pretreatment (PT) facility. This approach may provide an opportunity to begin operations of LAW and HLW prior to the completion of the PT facility, and would provide key system redundancies to the WTP plant and tank farms. I have also established an organization at the Office of River Protection to implement the solutions identified through this expert review process.

Your proactive engagement with the Department of Energy (DOE) has helped to define an effective approach for resolving the technical issues with the WTP project. Your staff has also been tremendously cooperative and helpful in providing the State of Washington's important perspective on these issues. These interactions have been very beneficial for DOE and I trust they have been transparent and informative for the State of Washington. This model of interaction between the State of Washington and DOE builds trust and enhances communication while preserving our respective roles as the owner of the cleanup and the regulator. We look forward to continuing this constructive working relationship.

To provide you an update on the project, the construction of the LAW facility, the Analytical Laboratory, and the Balance of Plant Facilities remains on track to be completed in accordance with DOE's construction commitments.

The DOE-led experts also reviewed the design of the HLW facility, and now better understand what work is needed to resolve the technical issues (e.g., wet process cell redesign and quality assurance). The construction work in areas not impacted by technical issues can be ramped up, and we are moving forward to redirect funding to support these activities.

The DOE-led experts also reviewed the design, and operating and maintenance concepts for the PT facility. These reviews have concluded that more work is needed to address major technical issues involving the mixing efficiency of the pulse jet mixers and the potential of a hydrogen gas release. To resolve these issues and inform our consideration of the additional work, the Department will conduct full-scale testing of the pulse-jet mixed vessels with simulants that reflect the physical and chemical nature of the wastes. The appropriate leadership team for this testing is now being identified. The best expertise, including that from Pacific Northwest National Laboratory (PNNL), the Savannah River National Laboratory (SRNL), other national laboratories, industry, and the academic community, will be utilized to define the test objectives and plans, specifying the instrumentation requirements, developing and qualifying the simulants, and evaluating the test data. Construction progress in this facility will be limited until these technical issues are effectively resolved.

Work to resolve other technical issues will involve conducting additional testing and implementing design changes needed to address erosion and corrosion issues; adding, where appropriate, certain redundancies to the WTP process; adding methodologies and technologies to monitor the structural integrity of vessels, components and piping in the Black Cells; completing structural upgrades to installed vessels, equipment and piping, as necessary; and determining whether there is a need to pre-condition the waste feed prior to processing it in the PT facility.

We share the goal of resolving the issues, completing the WTP project, and completing the tank waste mission as soon as possible. I want to reiterate my appreciation for your leadership and support as we continue to resolve these issues in order to achieve the successful completion of the WTP project. The model we have created will serve both of our organizations well into the future. I wish you the best in your future endeavors.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven Chu". The signature is fluid and cursive, with the first name "Steven" and the last name "Chu" clearly distinguishable.

Steven Chu

cc: Robert McKenna, Attorney General, State of Washington  
Jay Inslee, Governor-Elect, State of Washington  
Bob Ferguson, Attorney General-Elect, State of Washington  
Ignacia Moreno, Assistant Attorney General for Environment and Natural Resources