

DNFSB Public Meeting on Safety Culture Improvement Efforts at WTP

written version of remarks delivered by Steven Ashby, PNNL Laboratory Director, August 25, 2015

Good evening. I am Dr. Steven Ashby, Director of the Pacific Northwest National Laboratory. It is my pleasure to be here. I wish to affirm my commitment to the partnership we have developed and underscore the Laboratory's continued support in providing scientifically defensible solutions to the challenges at the Hanford site. I know that we all are committed to the success of the Hanford mission, and for ensuring the safety of those executing that mission.

As Dr. Wellman mentioned earlier, PNNL has supported the Hanford mission and site operations for more than 50 years. We have developed considerable expertise in areas central to the cleanup effort and we are proud of our many contributions. We also feel a sense of shared responsibility for the future. After all, we and our families live here. It should be no surprise that we fully support the need to remediate the site as quickly and cost-effectively as possible.

Institutionally, our scientific roots lie within the original Hanford site mission. Before we became a national lab, we were the site laboratory providing the scientific and technical expertise needed to develop the chemical and engineering processes to address the Hanford and Savannah River tank wastes. As the site mission progressed, we contributed to the development of treatment processes being implemented today.

Over time, the site mission evolved and PNNL grew into a multi-program National Laboratory. During these transitions, there was a period in which we were not engaged in the maturation of technology and development of next-generation solutions needed to reduce the cost and risk of the Hanford mission. I am pleased to say that this is no longer the case. DOE, contractor, and Laboratory leadership have worked collaboratively to reinvigorate our working relationships around a common goal of solving one of the Nation's most important cleanup challenges.

Over the past few years, we have seen a change in how the Hanford site offices and site contractors approach and engage the national labs. We are once again viewed as strategic partners in the cleanup mission. It is recognized that we are at our best when working on the most difficult technical problems, especially those that will require sustained effort over many years. We are encouraged to raise concerns openly and they are debated without fear of reprisal. As a result of this renewed engagement, PNNL is working on mission-critical challenges to enable today's baseline. We also are conducting analyses and maturing technologies to provide alternatives to that baseline that will reduce the risk and cost of cleanup for tomorrow. And we are developing long-term solutions to reduce the legacy stewardship costs.

For example, PNNL is currently leading and contributing expertise to help integrate teams of Bechtel National and PNNL experts to resolve the technical issues of mixing, criticality, and flammable gas retention. These issues, identified by then-Secretary of Energy Steven Chu, must be resolved in order to resume design and construction of the Waste Treatment Plant. Additionally, PNNL is developing new glass formulations and alternative processing approaches that enable significant improvements in waste loading while still meeting both processing and product performance constraints. Developing glasses that are more tolerant to key waste components not only provides a technical basis for increasing waste loading (which ultimately reduces canister production counts), but also provides opportunities to minimize or eliminate certain pretreatment options. The integrated program is focused on reducing the overall WTP mission life and cost by increasing waste throughput for WTP facility operations.

In closing, we greatly appreciate the renewed emphasis on partnership with PNNL by DOE EM in general, and by the leadership at the Office of River Protection in particular. The decision to more fully utilize PNNL's historic knowledge, as well as our world-leading expertise, to help provide solutions to long-term scientific and technical challenges is essential to the success of the Hanford mission. We look forward to continuing this productive partnership well into the future.