

Tank Waste Committee Draft Advice

Topic: Hanford Glass Scientist: Kudos and continuity Investment

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Originating Committee: TWC

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The Hanford Advisory Board (Board) wishes to applaud the U.S. Department of Energy (DOE) for the work it has done over many years to continue improving glass formulation knowledge as we near the start of tank waste treatment. The Board believes this has been a wise investment in research and institutional capacity that has already served to shorten the projected Hanford mission and has the potential to lead to extraordinary further reductions in the amount of time, money, and infrastructure required to accomplish a quality cleanup.

During the March Tank Waste Committee meeting, the Committee received a presentation from Albert Kruger, DOE's Chief Glass Scientist, on DOE's Enhanced Waste Glass Effort. This presentation outlined DOE's plans to develop time-saving and technically defensible methods for testing its glass product; to institute processes during Waste Treatment Plant (WTP) operations that would allow timely generation of quality glass; and to develop creative ways of assuring the public and regulators of the durability of glass over time. Dr. Kruger also reported on DOE's successes in finding significant new efficiencies in the amount of waste that can be loaded into every canister of glass. The promise of these potential efficiencies is great, up to and including the potential that DOE could be spared the need for a Supplemental Low-Activity Waste facility if identified improvement efforts continue to be pursued.

During that same meeting, representatives from the Washington Department of Ecology pointed out that it is no simple feat to bring waste glass innovations out of the lab and into production, which is why it is so critical that this role continue until the WTP is operational and beyond so that lessons may be learned from the experience of making glass at Hanford.

The Committee also came to understand that the role of DOE Chief Glass Scientist will soon turn over as Dr. Kruger retires, but no one is currently being trained to take on this critical function. This is a story that will be often repeated in the next several years as the torch of responsibility for a protective Hanford cleanup passes on to the next generation. Further, there appears to be a lack of commitment that the glass scientist staff function will continue to exist. The Board feels that this would be a great loss for the DOE, for Hanford, for public assurance of long-term safety, and for taxpayers as well.

The Hanford glass scientist is a clearly valuable function that has greatly benefited Hanford for many years, and the Board hopes that DOE will invest in continuing this success.

Advice

The Board advises that it is vital that DOE invest in retaining a role of Chief Glass Scientist for Hanford, and to begin training that person now.