

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 14, 2022

TO: Christopher J. Roscetti, Technical Director
FROM: B. Caleca, P. Fox, and P. Meyer, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending January 14, 2022

DNFSB Staff Activity: R. Csillag was onsite for training and site familiarization.

Members of the technical staff met with DOE ORP representatives to discuss oversight of the Waste Treatment Plant (WTP) contractor's recent integrated safety management assessment, as well as their approach for providing oversight of other ongoing readiness efforts. They also discussed DOE ORP's oversight of the Chemical Safety Management Program. The same team will meet with WTP contractor representatives in early February to discuss WTP safety management programs with a primary focus on the Chemical Safety Management Program.

Members of the technical staff met with DOE ORP and WTP contractor representatives to discuss the results of their review of the High-Level Waste Facility Preliminary Documented Safety Analysis, Revision 9. The discussion provided an opportunity provide near-term feedback to the WTP contractor and clarify the staff team's findings.

Tank Side Cesium Removal (TSCR): The DOE Startup Authorization Authority for the TSCR system approved its startup. The contractor is expected to complete preparations and use the system to start production scale pre-treatment of low-activity waste next week.

Waste Treatment Plant: The resident inspectors met with DOE ORP and WTP contractor representatives to discuss a proposed communication of their actions to address Board safety concerns associated with potential releases of anhydrous ammonia. The discussion focused primarily on startup of the Low-Activity Waste Facility. WTP contractor personnel noted that they have completed a comprehensive set of process hazards analyses that resulted in the design and implementation of a robust set of controls to protect workers from the hazard and address the Board's concerns. However, additional work will be necessary to confirm that controls adequately support eventual startup and operation of the High-Level Waste Facility.

Inner Area End States: Contractor personnel held their first field drill for the project since October 2021, simulating an airplane crash at B Plant that severely injured a worker. Because of a recent re-implementation of higher level COVID controls, Hanford Fire Department personnel were unable to participate. However, a doffing team was deployed into the warm zone and controllers talked through the doffing process with the team. The contractor self-identified issues with communication, equipment, and command and control of facility resources in the field. The DOE facility representative and the observing resident inspector both noted that the responders were slow to provide adequate medical aid to the injured worker.

Liquid Effluent Retention Facility (LERF): Contractor personnel submitted their final Evaluation of the Safety of the Situation for solids accumulated in transfer piping connected to Basin 44 (see 10/29/21 report). Based on the negative Unreviewed Safety Question Determination, the volume of solids estimated does not challenge the material-at-risk limits for the basins. As a result, operational restrictions were lifted on the basin.