

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 1, 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 July 1, 2022

Tank Farms: The Resident Inspectors met with Tank Operations Contractor (TOC) engineering personnel to discuss ongoing work to address the unexpected discovery of standing water in the encasement of an AW farm transfer line (see 6/3 and 6/17/2022 reports). During the discussion, TOC engineers noted that they are in the process of performing an extent of condition review and have discovered wetness in five of 25 additional lines that were inspected. They also discussed their expected approach for addressing the issue. If approved, the approach will focus on monitoring conditions and mitigating degradation found rather than attempting to predict future failures. The goal of the approach is to safely maximize the useful life of the existing pipes.

224B Facility: The 224B facility had been in a surveillance and maintenance mode for several decades but is now being cleaned out in preparation for demolition. Most of the remaining nuclear material-at-risk is inside tanks located in the facility process cells. A resident inspector entered the C process cell of the facility along with contractor personnel and a facility representative to observe the existing conditions. The resident inspector was able to observe entry and exit procedures and areas where contamination is the highest. He also discussed the contractor's expected near-term work with contractor personnel and the facility representative.

Contractor personnel held a meeting to discuss a response to a loss of power to 224B that occurred when support personnel not assigned to the facility project team were conducting preventative maintenance work on the electrical system of the facility. Confinement ventilation fans stopped when power was removed. Although this condition was expected, the support personnel were unaware of procedural requirements to restore facility access after a loss of confinement ventilation and did not notify project personnel. If other 224B project personnel had not been present when the intermittent loss of ventilation occurred they would not have known that the recovery was required. Contractor personnel are continuing to gather information to support actions to improve future coordination of this type of work.

Building 324: A resident inspector observed a second critique meeting held to gather additional information from personnel regarding incorrect handling of a glovebox that was removed from the facility (see 6/17/2022 report). The meeting confirmed that, although project personnel had performed several walkdowns while preparing for the removal, radiological work planners had not been consulted and no formal job hazards analysis had been performed.

T Plant: A resident inspector observed a field drill; the scenario simulated a bomb detonation near outside waste containers, injuring one person. He noted that the drill team's use of props to simulate conditions was improved when compared to previous drills, and that control of the drill was enhanced by obtaining additional controller support from the TOC drill team. Overall, the scenario was challenging, and the facility response was good. However, radiological controls used during the evaluation of potentially contaminated individuals could be improved.