

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 4, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: B. Caleca and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending June 4, 2021

Tank Farms: During routine surveillance of safety significant valves that are used to provide double valve isolation (DVI), workers noted that insulating blanket material had shifted on some valves and, in certain cases, insulating material was caught between the valve stop and valve funnel disk. While the valves in the box that are currently used for the DVI control were not impacted by this condition, other valves located inside the box that might be used were affected. They were concerned that this condition, which might lead operators to believe that a valve was shut although still partially open, would be undetectable since the valves are located inside a shielded box and are not visible during routine operation. The Tank Farms Operating Contractor (TOC) issued direction prohibiting the use of valves that might be affected by this condition for DVI, performed a technical evaluation of the condition, and held a Plant Review Committee (PRC) meeting to review this concern. The TOC PRC voted to declare a potential inadequacy of the safety analysis and keep the restrictions on valve usage in place pending the results of the unreviewed safety question process and an extent of condition of similar valves.

Liquid Effluent Retention Facility (LERF): The contractor's corrective action review board (CARB) met to evaluate an apparent cause analysis (ACA) that was performed to address the discovery of contaminated material in an area that was not controlled for the presence of exposed radioactive contamination (see 4/30/2021 report). The ACA identified two causes for the event. First, it noted that the degraded condition of the Basin 44 cover resulted in exposed contamination that could be transferred to material that settled onto the cover. The contractor is currently replacing the Basin 44 cover and they expect that the replacement will address this apparent cause. Second, the ACA determined that less than adequate housekeeping practices allowed material to escape onto the basin cover, where it picked up the contamination and was subsequently spread into nearby areas by wind. The ACA identified corrective actions that address the existing housekeeping conditions. However, the CARB noted that, while these actions are necessary, they do not proactively prevent future contamination spreads that could result from inadequate housekeeping practices and subsequent discussion focused on the need for preventative measures. The CARB members identified action items that are expected to improve the ACA in this area. The resident inspector notes that CARB meeting was open and effectively managed, and allowed for the participation of both voting and nonvoting attendees.

Waste Encapsulation and Storage Facility (WESF): The contractor Hazard Review Board (HRB) met to evaluate a work team's readiness to remove the truck port cover blocks from the WESF canyon. The concrete cover blocks have been replaced with lighter, steel plate covers as a part of ongoing facility preparations that support future transfer of the cesium and strontium capsules that are currently stored in the WESF pool to dry storage. The work will require two critical lifts within the canyon. The HRB determined that both the work instructions and the team were adequately prepared to perform the work. A resident inspector observed the HRB's deliberations and noted that the Field Work Supervisor and other members of the team demonstrated a thorough knowledgeable of the work scope and related hazard controls, and had a firm understanding of their intended roles and responsibilities. The HRB members were well prepared and performed a thorough evaluation of the team and the work documents.