

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 24, 2021

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 September 24, 2021

DNFSB Staff Activity: A staff review team met with DOE and Waste Treatment Plant contractor personnel to discuss High-Level Waste Facility hazard controls and supporting information. Among other things, the interaction provided important information that advanced the staff's understanding of the approach that the contractor intends to use to address flammable gas hazards within the facility.

Waste Encapsulation and Storage Facility (WESF): Resident inspectors observed a Plant Review Committee (PRC) meeting that contractor management held to evaluate the potential inadequacy of the safety analysis concerning a G Cell fire (see 9/17/2021 report). The PRC members agreed that the condition represents an unreviewed safety question, as there is the potential for an increase in the probability and consequences of capsule failure during a fire. They also agreed that the previously implemented operational restrictions on capsule transfers to the G Cell, with an allowance for emergency transfers, should remain in place. An evaluation of the safety of the situation (ESS) and justification for continued operations (JCO) will be submitted within 30 days.

Central Waste Complex: A DOE Senior Review Board (SRB) met to review an ESS and JCO. The central plateau cleanup contractor submitted the ESS and JCO to address the unreviewed safety question related to the contractor's inability to visually inspect certain waste containers (see 9/10/2021 report). The SRB recommended approval of the ESS and JCO.

105-KW Basin: Radiological control technicians (RCTs) identified contamination levels that exceeded the void limit for their radiological work permit (RWP) during a surveillance entry to investigate elevated continuous air monitor (CAM) readings in the facility's chiller bay. During the contractor in-progress ALARA review, facility personnel stated that a ventilation fan was out of service in that area and smoke tests indicated low air flow; additionally, air samples taken by the RCTs prior to entry did not indicate elevated airborne radioactivity. As a result, contractor RCTs suspected that the cause of the CAM's indicated high airborne radioactivity was the accumulation of radon daughter products, though the area was controlled as an Airborne Radioactivity Area. During the entry, RCTs surveyed an unbagged and unlabeled valve. The survey found removable alpha contamination above the RWP void limit. The valve is believed to have been removed during maintenance sometime in 2019, but the contractor is still working to determine why it had been kept within the room.

Building 324: Contractor personnel successfully pulled the first sections of drill casing from a Room 18 pilot hole using a hydraulic jack. Once the force required to remove casings is low enough to re-engage the drill rig the work team will transition to micropile grouting.

Hanford Site: Glyn Trenchard was reassigned as the new Assistant Manager for Safety and Environment and the Assistant Manager for Safety and Quality. He was previously acting in that role since the April 2021 reorganization allowed the two organizations to be led by a single senior executive service position.