DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 14, 2025

TO: Technical Director
FROM: Hanford Site Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending March 14, 2025

242-A Evaporator: H2C held a Plant Review Committee (PRC) meeting to evaluate a proposed Unreviewed Safety Question Determination (USQD) regarding out-of-tolerance readings on safety-related flow switches recorded during their three-year surveillance. A Potential Inadequacy of the Safety Analysis (PISA) had previously been declared while H2C engineers assessed whether the surveillance interval for the switches was too long to ensure their ability to perform their safety function. H2C concluded that the readings were the result of weaknesses in the calibration technique used in the surveillance procedure. Since the components themselves were operable and the procedure had been revised, the PRC voted to approve a negative USQD and submitted an evaluation of the safety of the situation to the field office. Resident Inspectors verified that, had the evaporator been operating while these switches were in service, the inadequate surveillance would have constituted a technical safety requirements violation.

Low Activity Waste (LAW) Facility: A resident inspector observed performance demonstrations simulating system breaches and hot work conducted in a mock radiological area to support preparations for hot operations at the LAW Facility. The resident inspector identified weaknesses like those observed during previous electrical work proficiency demonstrations (see 2/21/2025 report). The observations were provided to radiological control management.

Hanford Site: Resident inspectors observed emergency response drills performed at the Capsule Storage Area and Integrated Disposal Facility (IDF). The drill at the IDF was performed as part of an ongoing management self-assessment that supports establishing readiness to receive LAW Facility glass and secondary waste at the facility. The Hanford Fire Department response was delayed by confusion regarding location of the facility and the facility did not send messages normally used to support drill initiation and notification of events. These results indicate that contractor management needs to better integrate this new facility into site operations. At both drills, emergency response was hampered by a lack of understanding of the radiological conditions at the event scene. The scenarios presented for these drills included a potential radiation hazard, but there was no radiological contamination. These conditions were apparent from the simulation. However, responders, in some cases, presumed contamination was present resulting in added steps and controls, which slowed the response.

Capsule Storage Area (CSA): The Contractor Operational Readiness Review (CORR) team completed their evaluation of the CSA facility readiness to start operations (see 3/7/2025 report). The CORR team out-brief identified three pre-start findings, including weaknesses in procedures, meeting minimum operational staffing, and meeting educational requirements.

Central Waste Complex: Nuclear safety personnel determined that the large waste box, which was found to have a criticality nonconformance (see 2/28/2025 and 2/14/2025 reports), is adequately protected by existing controls. Therefore, they concluded that the condition does not represent a Potential Inadequate Safety Analysis.