DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 31, 2025

TO: Acting Technical Director FROM: Hanford Resident Inspectors

SUBJECT: Hanford Activity Report for the Week Ending January 31, 2025

DNFSB Staff Activity: R. Csillag and D. Montierth were onsite observing DOE's assessment of 242-A readiness to start operations after an extended outage.

242-A Evaporator: A resident inspector and DNFSB staff observed the first week of DOE's Readiness Assessment (RA) of the evaporator facility. This RA had been suspended since last year (see 7/12/2024 Report). RA team members observed the replacement of a thermocouple, an emergency preparedness drill, and conducted interviews with personnel responsible for the facility's systems, operations, and maintenance. RA team members observed the conduct of facility personnel during water runs performed in December as preparation for the assessment (see 12/6/2024 report). The RA team will continue the assessment before presenting the team's initial findings and observations next week and will issue their final RA report later next month.

Tank Farms: WRPS began retrieving waste from single-shell tank (SST) A-102 (see 1/24/2025 report). A-102 retrieval will occur concurrent with ongoing SST A-101 retrieval.

High-Level Waste (HLW) Facility: A resident inspector met with BNI nuclear safety basis managers and subject matter experts to discuss piping failure modes assumed for various design basis accidents analyzed in the HLW preliminary documented safety analysis that are not associated with chemical releases. The primary basis for their assumptions is NUREG 800, *Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants*. However, BNI has made some modifications to the NUREG's standard approach to account for HLW Facility design specifics. The assumptions BNI uses appear conservative and appropriate for the analyzed accident types.

Waste Treatment Plant (WTP): The operating steam plant boiler, which provides heating steam for the WTP facilities including the Low-Activity Waste Facility and Laboratory Facility, tripped offline when maintenance personnel modified a system control communication circuit to support a shift to a different boiler. A review of the incident determined the maintenance personnel did not perform the modification at the correct time in the transition sequence. This error resulted from informal communications and inadequate procedure coverage. Additionally, the plant recovery was hampered by a malfunctioning damper and a separate procedure deficiency; both were known conditions that had existed for a significant period without resolution. The resident inspector discussed this occurrence with plant management. Plant management understands the need to improve the documentation and resolution of minor deficiencies before they result in more significant adverse conditions.

Hanford Field Office (HFO): A resident inspector observed an HFO management board conduct the final oral examination of a Facility Representative candidate assigned to oversee Building 324. The examination was rigorous, and the board voted to pass the candidate.