

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 26, 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 August 26, 2022

DNFSB Staff Activity: E. McCullough was onsite for site familiarization and observations.

Hanford Site: A DOE headquarters team was onsite performing an assist visit focused on improving technical safety requirements (TSR) documents; the team met informally with DOE and contractor nuclear safety personnel to discuss methods and practices for ensuring TSR documents reflect requirements from 10 Code of Federal Regulations Part 830 and DOE orders. This visit is part of a series being conducted across the complex to ensure consistent incorporation of related requirements across projects and sites. Meetings were held discussing the TSR documents for the Waste Encapsulation and Storage Facility (WESF), Canister Storage Building, and Tank Farms. Additionally, a meeting was held to discuss coordination of upcoming readiness activities for the WESF and Capsule Storage Area (CSA), which support retrieval and packaging of cesium and strontium capsules currently held in wet storage at WESF and their transfer to the CSA for dry storage. The resident inspectors noted that individuals involved in the meetings were knowledgeable and engaged, resulting in meaningful discussions.

Central Waste Complex: Contractor personnel briefed the resident inspectors on the Hanford transuranic (TRU) waste program. Certification and shipment of TRU waste containers from Hanford Site to the Waste Isolation Pilot Plant (WIPP) were suspended in 2011. The Tri-Party Agreement (TPA) calls for the re-initiation of certification activities by the end of fiscal year 2026, and resumption of shipments to WIPP by the end of fiscal year 2028. Project personnel discussed their ongoing activities in support of achieving the TPA milestones including the off-site commercial repackaging of large, non-compliant waste containers, use of non-destructive analysis (NDA) to sort certifiable waste, upgrades to NDA equipment, and evaluation of capabilities and infrastructure to support expanded on-site waste processing and repackaging to support the milestones. To support the 2028 date, there are also milestones to complete a 30% design of any new capability by 2024, and the related 90% design by 2026.

Waste Encapsulation and Storage Facility. The contractor Hazard Review Board (HRB) met to evaluate the work team's readiness to perform ventilation exhaust duct tie-in work in the canyon. The work involves cutting a six-inch hole into a highly contaminated duct. During the meeting, participants identified the need to prevent the cut-out plug from falling into the duct and the ability to retrieve it should it fall. The HRB voted to approve the work package pending resolution of this issue.

Tank Farms: DOE and the Washington State Department of Ecology announced an agreement on how to respond to leaking single-shell tanks (SST) B-109 and T-111. Among other actions, the agreement requires DOE to cover the T and B SST Farms with interim surface barriers to minimize further migration of released dangerous waste constituents toward the groundwater. The agreement will also provide opportunities for public engagement during the implementation of agreed actions.