

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 23, 2025

TO: Technical Director
FROM: Hanford Site Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending May 23, 2025

Central Waste Complex: CPCCo has completed approximately 80% of its work activity aimed at minimizing fire hazards in waste storage buildings by replacing wood pallets with metal pallets and de-stacking multi-tier arrays that still contain drums stored on wood pallets (see 3/8/2025 and 5/2/2025 reports). There have been seven contamination events associated with these activities this year. Prior surveillances have not identified all container degradation and associated contamination due to the inaccessibility of some container surfaces during the routine inspections. However, during waste handling operations, the otherwise inaccessible surfaces are exposed, allowing discovery of the contamination. In response to the increase in contamination events, CPCCo has upgraded the radiological postings for the interior of several buildings to radiological buffer areas to reduce the potential for contamination spreading out of the buildings. The resident inspectors consider this posting appropriate for storage but inadequate to protect workers during waste handling operations when the contaminated areas become accessible. The 10 CFR Part 835—*Occupational Radiation Protection* definition of a contamination area (CA) includes not only accessible areas that have contamination levels exceeding threshold values but also any accessible area that is *likely* to have contamination levels above the threshold. Considering the frequent discovery of degraded drums and contamination during recent waste handling operations, the resident inspectors observe that the discovery of contamination is likely and posting the immediate work area as a CA during waste handling operations and implementing associated contamination controls may be appropriate for worker protection. Additionally, this posting, together with the incorporation of contingency work procedures and equipment, which anticipate discovery of contamination, would enable workers to perform contamination control actions such as container overpacking, without the need to terminate the operation and develop separate recovery plans. The resident inspectors have shared their observations with the contractor and HFO management.

Low Activity Waste (LAW) Facility: The LAW facility's Chemical Safety Management Program (CSMP) includes an access lockout/tagout (LOTO) as one of its controls to protect workers from certain facility hazards during pour cave entry. Facility personnel identified that pour cave work was performed on multiple days by maintenance workers who did not lock onto the required CSMP access LOTO. At the fact-finding, participants identified multiple weaknesses in CSMP implementation, including inadequate information on postings and the work package not incorporating the CSMP control into the work instruction. As a result, workers believed the hazardous energy LOTO they implemented was the only LOTO required. Because the CSMP access control LOTO was in place throughout the work activity, the workers were not exposed to potential hazards even though their locks were not applied. WTCC is working to resolve the posting and documentation issues and will perform a causal analysis.

Hanford Site: DOE designated Brian Harkins, the Hanford Field Office Assistant Manager for Mission Support and Acting Deputy Site Manager, as acting Manager of the Hanford Field Office.