

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 20, 2026

TO: Technical Director
FROM: Hanford Site Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending March 20, 2026

Central Waste Complex (CWC): HFO has approved installation of lightning protection systems (LPS) and vehicle barriers for waste storage buildings at the CWC. Installed LPSs are the preferred control to address direct or indirect lightning strikes to waste containers outlined in DOE-STD-5506-2021, *Preparation of Safety Basis Documents for Transuranic (TRU) Waste Facilities*. The resident inspectors identified the absence of LPS at CWC during a cross-complex field operations focus area review (see 6/7/2024 report). Vehicle barriers prevent fires and releases due to vehicle impacts with waste containers or building support columns. The Board identified the need for improved vehicle barriers at CWC in a November 16, 2021, letter to DOE.

Low-Activity Waste (LAW) Facility: The WTCC Emergency Preparedness (EP) organization conducted a limited drill that simulated an ammonia leak event at the ammonia storage building. The scenario also provided an opportunity to evaluate a radiological response by including a simultaneous simulated spill event in the Laboratory Facility. A resident inspector observed the response to the radiological spill. He noted deficiencies in the response, including lack of response timeliness, ineffective command and control at the spill scene, and inadequate control of the affected area to prevent contamination spread. However, drill planning and control inadequacies most likely contributed to these deficiencies. Because management chose to continue all facility work throughout the drill, the responding radiological control supervisor and the radiological hazard assessor were managing multiple ongoing non-simulated hazardous work activities while responding to the simulated event. However, they were unable to pass off responsibilities or pull in additional support because of the ongoing work assignments and limits on approved resources for the drill. Additionally, management assigned only a single radiological control technician to participate in the scenario, which affected multiple rooms. Similarly, the EP organization assigned only a single controller/evaluator to control the actor, the responding personnel, and the multiple rooms. This factor also prevented the use of timely, realistic simulations for contamination and allowed the event participants to inject other unplanned and unneeded response simulations. Lastly, the EP organization did not adequately control the drill area; exempted personnel passed through the event scene multiple times during the drill. Drill participants attending the hotwash noted deficiencies like those observed by the resident inspector. The drill coordinator included the observations in the post-drill quick notes.

Plutonium Concentration Facility (224-B): The 224-B facility is a small, deactivated plutonium concentration facility in the 200 East Area next to B Plant, which is currently a Hazard Category 3 facility. CPCCo has proposed downgrading the facility to below Hazard Category 3. The HFO Senior Review Board (SRB) met to review the Safety Evaluation Report supporting the proposed downgrade. During their review, the SRB determined that while the facility meets radioactive material inventory requirements for downgrade, CPCCo did not propose administrative controls to ensure the material inventory in the facility footprint stayed below required quantities. Consequently, they did not approve the change.