

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 27, 2024

**TO:** Timothy J. Dwyer, Technical Director  
**FROM:** B. Caleca, P. Fox, and P. Meyer, Resident Inspectors  
**SUBJECT:** Hanford Activity Report for the Week Ending September 27, 2024

**Central Waste Complex:** CPCCo has begun replacing wood pallets with metal pallets to reduce combustible loading (see 10/16/2023 report). The operation was limited to three waste storage building and includes 49 pallets of waste containers. A resident inspector observed the operation in building 2402WE, which was well-executed. The operation is expected to be completed this weekend, with additional pallet replacements planned for FY2025 – 2027.

**Direct Feed High-Level Waste Facility (DFHLW):** A resident inspector observed a DFHLW Technical Steering Group (TSG) meeting, convened to discuss waste transfers between the tank farms, the high-level waste transfer vault (WTV), and the DFHLW Facility. Under the initial concept, waste would be recirculated between the WTV and DFHLW Facility rather than intermittently transferred to the facility for batch processing. Presenters also noted that the original transfer lines for the project were already installed using a different design than the lines for the Direct Feed Low-Activity Waste (DFLAW) facility, and that recirculation of waste introduces additional project risks to DFHLW safety basis assumptions. The TSG requested documentation of the advantages and disadvantages of both recirculation and intermittent waste transfers from the WTV, as well as the use of existing transfer lines or new lines like those at DFLAW. The TSG expects to have these studies finalized at the end of the year.

**Waste Treatment Plant (WTP):** A resident inspector observed a radiological work proficiency session hosted for backshift craft workers to refresh and expand best practices as the project continues to prepare the facility's workforce for working under radiological controls. This proficiency covered donning and doffing of standard contamination area (CA) dress, best practices for transferring material or securing cable into CAs during work, and self-survey on exit using a mock-up area with simulated postings established in a clean area. The resident inspector noted that the radiological control technicians (RCTs) conducting the training were knowledgeable and attentive to both correcting improper technique and providing recommended best practices above and beyond Radiation Worker 2 training to meet 10 CFR 835 requirements. Given the lack of opportunities to perform radiological work during commissioning, this supplemental training will help keep the workforce refreshed on best practices.

Plant engineers have evaluated options to recover the Melter 1 east discharge head after operators inadvertently overfilled a glass container (see 9/20/2024 report). Plant management has decided to install a blank in the glass flow path from the Melter to protect workers from any inadvertent glass pour while performing the recovery work. They will then break the overfilled container free, lower it from the discharge head, and remove it from the pour cave. The solidified glass that fills the seal head area above the container will then be removed from below, using pneumatic tools, followed by installation of a new container and restoration of the glass flow path. Plant management is also performing a causal analysis to identify repairs, procedure changes, and operator training necessary to prevent recurrence of this type of event.