

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 24, 2026

Hanford Site Resident Inspectors Activity Report for Week Ending April 24, 2026

324 Building: Building 324 hot-cell grouting preparation required contractor personnel to enter the hot-cell airlock to manually engage latches for the A-Cell doors. Workers attempted to engage the latches using hand tools, but were unsuccessful. Workers then impacted the hot-cell doors with a scissor lift to compress the door's seals enough to allow a second worker to engage the latches, which was also unsuccessful. Despite this deviation from the work procedure and the fact that facility personnel observed the activity through cameras, they did not initially recognize the need for an event investigation and appropriate corrective actions. When the facility representative learned of the event, they elevated it to CPCCo management. The resident inspector observed the subsequent critique held over a week after the event and noted that not all workers involved had given statements prior to the critique. Contractor management and performance-assurance personnel elected to share the video of the event to facilitate worker participation. Participants noted the complications from loss of facility functions that influenced the work planning and execution of the activity, but there was consensus that work crews should feel empowered to pause an activity when it cannot be performed to its work instructions, and that management oversight needed to be more proactive in recognition and reporting of events.

Tank Farms: After opening the AP tank farm flush pit, workers discovered melted sleeving and discoloration on a water hose that had contacted a heater inside the pit. Usually, the hose and sleeving are moved in and out of the pit through a narrow port that does not allow inspection of the pit itself, and work crews responsible for the most recent handling of the hose were not aware of the presence of a space heater in the pit. Engineering drawings from the 1990s identify the heater, but ensuring the heater was operating at the beginning of the freeze-protection window was only added last year. In addition, heaters for other pits blow heated air into the pits rather than putting heating elements in proximity to pit contents. As a result, workers that perform water flushes were not aware of the potential risk of damaging the hose and sleeving. Contractor personnel intend to perform an extent-of-condition review of whether this hazard exists for other flush pits and heaters installed in the tank farms. The flush pit heater has been de-energized and administratively locked. A replacement hose is being procured while contractor personnel develop modifications to the water delivery system to mitigate the potential hazard.

Low Activity Waste (LAW) Facility: The LAW facility autosampler (ASX) system uses a robotic arm with a needle to take melter-feed samples and sends them between the Laboratory and LAW facilities using a pneumatic transfer system. Needles are replaced using tools placed in special carriers that are sent through the transfer system. During a work evolution to replace ASX needles, workers failed to disassemble the needle-withdrawal carrier to verify the needle had been removed before sending a replacement needle to LAW in a carrier. As a result, the LAW control room received an arm-position failure alarm, and the ASX system shut down in a safe state. A resident inspector observed the fact-finding, during which participants self-identified the procedural noncompliance, less-than-adequate tracking of work steps and communication between the control room, and unclear expectations when using a combination of continuous-use and reference procedures.