DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 2, 2026

Hanford Site Resident Inspectors Activity Report for Week Ending October 2, 2026

Tank Farms: A resident inspector (RI) attended an event learning meeting (ELM) to discuss the response to very high temperatures in a bucket of curing epoxy being used to recoat pit SY-101A (see 9/25/2026 report). The work crew explained that the three-gallon epoxy kit is sized to mix the entire contents into a bucket provided by the manufacturer. Based on the inspections performed by contractor quality assurance personnel and statements made by the work crew, the work crew mixed the epoxy as directed by the manufacturer. After the ELM, the RI reviewed available information about the epoxy and the expected hazards for similar products. The epoxy used was added as a pen-and-ink change to the work instruction due to the old product being unavailable. Similar to other multi-part epoxies, the manufacturer only provides Safety Data Sheets for the constituent components and not the mixed epoxy, and the product instructions only indicated a potential thermal hazard if curing epoxy is placed in a sealed container. Based on this information, the RI believes the manufacturer's documentation did not adequately communicate the expected behavior when mixing an entire kit at once.

Low-Activity Waste (LAW) Facility: An RI observed shift turnover, control room operations, and a protective action drill simulating a take cover siren during the night shift at LAW. During shift turnover, control room operators began conditioning melter 1 for feeding and pouring glass; the RI noted strong knowledge of system functions and turnover of operations during the execution of an operating procedure. The RI then observed portions of an activity to empty low-contamination liquids into the radioactive liquid waste system until the protective action drill commenced. As the workers were not exempted, workers correctly followed expectations to follow all postings as they exited LAW into the annex to take cover. The RI did note that public address system announcements were difficult to understand due to ambient noise, but workers used their radios to communicate their location and verify required actions. The RI also noted three personnel did not sign out of the accountability logbooks, either not exiting the LAW for the drill as required or failing to sign out when they exited earlier. The controllers for the drill provided adequate coverage for the annex and trailer villages in play and identified opportunities for improvement.

An RI attended an After-Action Review (AAR) for the inadvertent delivery of a contaminated air sampler offsite for calibration. The calibration facility surveyed the instrument upon receipt, found contamination, and immediately notified WTCC. WTCC radiological control personnel retrieved the air sampler and returned it to the Waste Treatment Plant. Radiological control personnel found no contamination in the work areas and transport vehicles with which the sampler had contact. WTCC took immediate action to implement surveys of all instrumentation being sent offsite. WTCC could not determine how the contaminated sampler left a contamination area without detection during the clearance survey. Survey records for this equipment were missing at the time of the AAR, and the individual tasked with retrieving the sampler from the contamination area stated that the sampler was already out, leading them to believe it had passed its clearance survey.