

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 13, 2026

TO: Technical Director
FROM: Hanford Site Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending March 13, 2026

Low Activity Waste (LAW) Facility: The LAW Facility uses submerged bed scrubber (SBS) liquid level control as a defense-in-depth measure to prevent the release of chemically hazardous offgas into the facility. The design uses two interlocks to implement these controls. Both interlocks use input from the same SBS level instrumentation. The interlocks require a relatively smooth signal to function reliably. Currently, the Melter 2 SBS level instrumentation does not provide an output stable enough to prevent spurious interlock trips that interrupt melter operation. Plant engineering is working to identify the cause but has not found a solution. WTCC held a Plant Management Review Board (PMRB) meeting to evaluate a waiver that would allow operation without the two safety interlocks for thirty days. Instead, facility operators would use a set of compensatory measures in place of the interlocks during the period. These measures include reliance on a set of non-safety system interlocks that perform the same function as the safety interlocks, but at a different, more conservative, setpoint, and operator observation of alternative indications along with the instructions directing a manual trip to place the plant in a safe condition if the parameters exceed established values. Plant engineering will use the 30-day operational period to collect data to support their search for a permanent solution. HFO personnel present at the meeting raised relevant questions regarding the need to operate a full thirty days with the impairment, the technical basis for the impairment, potential solutions, and the reliability of the compensatory measures. The PMRB recommended approval.

Soil and Groundwater: A spray occurred and wetted an individual when they opened a connection while replacing a valve. The liquid contained expended resin used to remove uranium and technetium from contaminated groundwater. Responders removed the wetted clothing and verified the individual was free of radiological or chemical contamination. Facility radiological control personnel also posted the affected area as a radiological contamination area. The response effectively protected the individual and prevented additional contamination spread. Discussion during a subsequent critique meeting revealed that the instructions used for the activities leading to the event and for the valve replacement did not adequately cover the work performed. A miscommunication also occurred, resulting in the worker performing the valve replacement although the work supervisor intended to obtain additional work instruction prior to replacing the valve. Facility management is using the information from the meeting to identify any changes in procedure or work practices necessary to prevent similar future events.

Hanford Site: The resident inspectors have identified instances in which workers apparently performed work without required training or qualification, or without appropriate validation of qualifications prior to work performance. They discussed these observations with CPCCo management, who arranged a follow-on discussion with the D4 End States Operations Assurance Manager. He acknowledged the observations and noted that he had observed similar conditions. To address the issue, the training organization is performing a validation of training plans and associated data to ensure that information adequately supports the validation of worker training prior to performing work, and he has acted to reinforce expectations for qualification validation.