DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 18, 2026

Hanford Site Resident Inspectors Activity Report for Week Ending September 18, 2026

Staff Activity: The Board's staff held a teleconference with H2C and HFO personnel to discuss the hazard analysis and proposed control selection for remediating double-shell tank SY-103.

Tank Farms: Resident inspectors (RIs) observed a follow-up meeting held by H2C personnel to refine the event investigation of a cable break resulting in a near miss while removing abandoned power poles (see 9/4/2026 report). The RIs noted that investigators were well-prepared for the discussion with the equipment user manual and a review of recommended best practices with similar equipment. American Electric, Inc. (AEI) personnel noted that they had performed all the actions required in the operating manual, including load testing the boom, excavating around the pole, and verifying the pole moved freely. However, HMIS electrical utilities personnel responsible for similar work use a "pole puller" hydraulic tool prior to handling poles with a winch as a best practice. While H2C personnel finalize their investigation, AEI personnel stated that they were acquiring their own pole puller and watching HMIS personnel demonstrate its use.

Shift operations personnel entered the abnormal operating procedure for significant tank level changes in double-shell tank SY-103. The procedure requires personnel to secure any activities that may impact the affected tank, notify workers of the condition, consult engineering on level indications, and investigate possible causes. The procedure also requires flammable-gas controls for any work at the tank. Based on the available tank-level data and elevated stack ammonia readings, H2C subject matter experts believe this was the first significant gas-release event in the tank in over five years. Industrial hygiene technicians took readings after the event and confirmed there was no detectable flammable gas in the tank headspace. Based on the estimated volume change, personnel determined there was no risk of generating a flammable atmosphere.

Tank Side Cesium Removal: Operators performing a procedure to return a caustic metering pump system to operation following a pump replacement were unable to complete the procedure due to lack of flow through the pump. Personnel troubleshot the issue over several shifts until a work crew noted that a valve was incorrectly positioned. The supervisor reviewed a previous procedure revision and determined the initial-shift operators left the valve in this position. H2C management held an event learning meeting (ELM) to discuss the incident. Participants identified several issues with the operating procedure and shift turnover that contributed to the event. First, shift personnel did not adequately communicate procedure progress or system configuration during turnover. Usually, operators document progress on the paper copy of the procedure, but this procedure went through several revisions. Later shifts received a new copy without the prior shift's progress. Also, the procedure did not include a contingency for valve lineups if a task was not completed. Instead, operators could attempt the task again without realigning valves. Management committed to adding sufficient valve-lineup steps to this procedure and performing a review of similar procedures and reviewing turnover expectations to ensure relevant information reaches the correct personnel. Although outside the scope of this ELM, personnel identified that the pump arrived from the manufacturer with a check valve in the wrong orientation, which prevented normal flow through the pump.