

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 17, 2026

Hanford Site Resident Inspectors Activity Report for Week Ending April 17, 2026

Board Activity: Board Member P. Lee visited the Hanford site for familiarization on current high-priority activities including tank waste operations and retrieval; low-activity waste vitrification; cesium capsule transfers to dry cask storage; transuranic waste storage, certification, and shipment to the Waste Isolation Pilot Plant; and design work for facilities supporting future capability to treat and stabilize tank waste. Dr. Lee visited the Radiochemical Processing Laboratory (RPL) and met with Pacific Northwest Site Office and Pacific Northwest National Laboratory personnel to discuss ongoing work to support DOE activities of interest to the Board and the mission of the RPL. Dr. Lee and the Board's staff held in-person meetings with site management, the DOE Environmental Management Chief of Nuclear Safety, and contractor personnel to discuss major nuclear safety activities and the current status of DOE's response to the July 19, 2022, Board letter on the 242-A Evaporator facility safety strategy and the October 16, 2025, Board letter on the transportable storage-containing welding process used at the Waste Encapsulation Storage Facility. Additionally, Dr. Lee and the Board's staff held a meeting with regional stakeholders to discuss the Board's mission across the DOE complex, its involvement in Hanford site activities, and its most recent correspondence to DOE.

Tank Farms: During work to remove out-of-service ventilation ductwork in the SY tank farm, radiological control technicians (RCTs) discovered alpha contamination on a catch basin used to reduce the spread of potential contamination during work. Alpha contamination is not anticipated for this work scope, and the radiological work permit requires alpha-contamination surveys of personnel and equipment if any is detected during the work activity. A resident inspector observed the event-learning meeting to discuss the discovery of the contamination and the response that followed. Participants noted that the contamination was detected after some workers had exited the tank farm, having only been surveyed for beta-gamma contamination. RCTs interpreted the initial discovery as radon and held the smear taken from the catch basin—standard practice to determine if radon was the source of the alpha emissions. However, this was inconsistent with the radiological work permit and delayed alpha surveys of personnel, equipment, and waste. As a result, by the time the smear was confirmed to be contamination and not radon, workers had exited, re-entered, and exited the farm again. This required an extensive survey of locations outside the tank farms to verify no contamination had been carried out of the tank farms. The resident inspector notes that the workers' personal protective equipment (PPE) was adequate for the contamination levels encountered and continuous RCT coverage and surveys of workers' PPE during the activity did not indicate transfer of contamination onto workers. Participants also identified additional surveys required outside of SY tank farm. All surveys indicated there was no contamination to workers or clean areas.