## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

<b>TO</b> :	Acting Technical Director
FROM:	Hanford Resident Inspectors
SUBJECT:	Hanford Activity Report for the Week Ending January 24, 2025

**Hanford Site:** CPCCo declared a Potential Inadequacy in the Safety Analysis (PISA) for the Hanford Sitewide Transportation Safety Document (TSD) because the distances to offsite receptors from a radiological release are closer than those assumed in the TSD. The TSD had not been revised after DOE transferred unused land just north of the 300 Area to local jurisdiction. The resulting change places some transfers within 10 meters of the site boundary. CPCCo subsequently determined that a positive unreviewed safety question exists. Radiological shipments originating south of the Wye Barricade, except Department of Transportation (DOT) compliant and DOT special permit shipments, are prohibited until the safety of the situation is evaluated. This compensatory measure primarily impacts shipments onsite from the Pacific Northwest National Laboratory Radiochemical Processing Laboratory.

**Tank Farms:** WRPS has completed installation and testing of single-shell tank (SST) A-102 retrieval equipment. Management expects to complete punch list items, declare readiness, and start retrieval of tank A-102 waste next week. A-102 contains approximately 41,000 gallons of waste, which is mostly saltcake with a small amount of sludge and supernatant. Because of the small volume, WRPS expects to complete the A-102 retrieval this fall. A-102 retrieval will occur concurrent with ongoing SST A-101 retrieval. A-101 is about 56% retrieved.

WRPS held an emergency preparedness drill simulating an explosion and release of radiological material that contaminated two workers. A resident inspector observed the drill and noted that both fire department and operations personnel used an incorrect safe route of travel and crossed the simulated plume of released material while approaching the event scene. In addition, the resident inspector observed several basic radiological control deficiencies such as players chewing gum, improper use of personal protective equipment, and failure to perform a full body survey of the contaminated workers. Drill controllers also noted the deficiencies. The resident inspector subsequently discussed ongoing WRPS actions to address recent issues with radiological control performance in emergency preparedness drills, such as changes to training and to resource allocation for drills to give more workers opportunities to participate in drills.

**High-Level Waste (HLW) Facility:** A resident inspector observed a meeting of the HLW Technical Steering Group, which is a governance group tasked with evaluating opportunities and resolving technical issues that can impact the design and operation of the HLW Facility. Topics addressed were changes to the bubbler placement for the HLW melters, which would increase production capacity but require changes to the melter lid design and operation; alternatives to the use of silver mordenite as an offgas treatment, which are necessary because of the cost and availability of that media; and methods HLW Facility operations can use to correct received waste that exceeds waste acceptance criteria parameters, as the current design does not include a transfer line to return off-specification waste to the tank farms.