DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 4, 2024

TO: Timothy J. Dwyer, Technical Director
FROM: B. Caleca, P. Fox, and P. Meyer, Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending October 4, 2024

Hanford Field Office (HFO): Richland Operations Office (RL) and the Office of River Protection (ORP) have officially merged to become the Hanford Field Office (HFO).

An HFO evaluation board performed a thorough evaluation of a facility representative candidate for final qualification. The board determined the candidate meets qualification requirements.

High-Level Waste Facility (HLW): Resident inspectors observed an HFO senior review board (SRB) meeting held to review a team's evaluation of a proposed HLW safety design strategy (SDS) document revision. This revision supports phased implementation of DOE-STD-1189-2016, *Integration of Safety into the Design Process*. Among other changes, it also incorporates HLW mission scope for the Analytical Laboratory, the Chemical Safety Management Program, and use of the ARCON96 atmospheric dispersion model. The SRB noted that ongoing policy-level discussions about the use of alternate dispersion methodologies could have a future impact on the use of ARCON96, as implemented for HLW, and directed the addition of a condition of approval requiring the contractor to include the potential impacts as a project risk in the SDS. The SRB subsequently voted to recommend approval of the SDS.

Central Waste Complex: A resident inspector observed a contractor corrective action review board (CARB) convened to evaluate the effectiveness of corrective actions resulting from a previous technical safety requirement violation stemming from inability to perform adequate surveillances on 74 waste storage containers located at the Outside Storage Area (see 9/10/2021 report). The CARB concluded that the corrective actions have been effective.

Test Bed Initiative (TBI): WRPS has completed testing and is completing the final safety basis implementation and readiness evaluation for startup of TBI processing. This process will remove most radioactive particulate and cesium from 2,000 gallons of tank waste supernatant and transfer the liquid into Department of Transportation approved containers. After sampling to verify waste classification, DOE will compliantly ship the containers to nuclear waste disposal facilities in Texas and Utah, where the waste will be grouted and permanently disposed. A resident inspector walked down the TBI system with WRPS project engineers. The system is well-designed, and the hazard control set is adequate. The system appears ready for operation.

Low-Activity Waste (LAW) Facility: LAW Facility operators are entering their first biennial requalification cycle. A resident inspector observed the watch standing evaluation of two sets of control room operators to fulfill their requalification requirements. The evaluation was performed using the high-fidelity LAW Facility control room simulator. The scenarios presented to both teams were challenging and provided evaluators an excellent opportunity to evaluate operator performance of both normal and abnormal operations. The evaluator observations were critical, and their grading was fair. Both sets of operators performed adequately.