

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 11, 2025

TO: Technical Director
FROM: Hanford Site Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending April 11, 2025

Low Activity Waste (LAW) Facility: Contractor personnel briefed the team performing a combined Management Self-Assessment and Independent Verification Review of the LAW facility. The assessment team noted that there were a significant number of deviations from normal plant operating conditions that will only be addressed after completion of readiness activities, and the resident inspector noted other key documents and personnel qualifications remain incomplete. Due to the late introduction of radiological controls, only a limited subset of work activities will be available to observe radiological work. Additionally, resolution of any pre-start findings identified by the team will need to be completed in less than a month before the facility is scheduled to start its Contractor Operation Readiness Review.

Management held two tabletop events to support the integration of radiological controls into agitator replacement work instructions. The tabletops events also allowed a team that will present this work activity to assessors during upcoming assessments to rehearse their presentation of the material. Resident inspectors noted that the work instructions contained almost no information regarding required radiological or safety controls; relevant cautions and warnings were also absent. Neither the work instructions nor the review discussion adequately addressed safety or radiological control integration into the work activity. Meeting attendees identified these shortcomings. However, the responsible manager deferred most of these questions, indicating that the safety controls would be added prior to field performance but were not needed to support a tabletop review with assessors. Both the responsible manager and the supporting radiological control manager stated that radiological controls are contained in the radiological work permit and, per plant policy, are not included in the work instructions. The resident inspectors noted that a failure to include safety and radiological control information in work instructions can result in incomplete control implementation and sequencing during work.

Waste Encapsulation and Storage Facility (WESF): A resident inspector observed the remote welding of the inner lid on a mock transportable storage canister (TSC) assembled inside a vertical concrete cask (VCC). This operational acceptance testing is being used for training and procedure verification and is the last major testing activity required to be performed prior to commencing formal readiness preparations. Challenges encountered during the welding included blowing a fuse on the welding power supply and attracting insects, which interfered with the optical weld profile detector. The mock TSC will be moved to the mock-up test facility to critique the procedure and exercise the weld repair procedure, which involves cutting out and re-welding the lid. Welding of the outer lid on the VCC is planned to be performed next week.

Liquid Effluent Retention Facility (LERF): DOE approved H2C's request to start up the LERF as a Hazard Category 3 nuclear facility. The LERF previously operated as a radiological facility. The upgrade supports the commissioning of the Low-Activity Waste Facility using direct feed (see 3/20/2020 report).