

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 23, 2022

TO: Christopher J. Roscetti, Technical Director
FROM: B. Caleca, P. Fox, and P. Meyer, Hanford resident inspectors
SUBJECT: Hanford Activity Report for the Week Ending September 23, 2022

DNFSB Staff Activities: The resident inspectors and other members of the staff met with a Government Accountability Office (GAO) team that is starting a review of DOE management of Hanford site tank farms. Their review will focus on DOE plans for staging tank waste in preparation for waste treatment and the extent DOE management of the tank farms allows for alternative waste treatment methods. The GAO team requested this engagement with the Board's staff to gain their insight into site activities, which might influence the review.

Solid Waste Operations Complex: A resident inspector observed a Senior Review Board (SRB) held by DOE to evaluate several Evaluation of the Safety of the Situation (ESS) documents submitted by the contractor. These are intended to support three Justifications for Continued Operation (JCO) related to burial ground retrievals, transportation, and storage at the 200 Area Interim Storage Area (see 8/12/22 report). In addition to the controls proposed by the contractor, DOE personally proposed several Conditions of Approval and Operational Restrictions at the facilities. The SRB voted to recommend approval of the package subject to these additional requirements.

A resident inspector observed ongoing mock-up operations in support of future retrievals at the low-level burial grounds. The operations included excavation, radiological sampling, hoisting, and preparing the material for transport. The mock-up work was well planned and conducted professionally. The resident inspector provided observations concerning the level of rigor of the pre-job meeting, which were well received and fully addressed by facility management.

Hanford Site: A resident inspector met with DOE nuclear safety managers to discuss a recently issued document, which provides local DOE direction to Hanford Site contractors for nuclear safety implementation. The goal of the additional direction is to align DOE and contractor efforts to improve the efficiency of the safety basis approval process. For example, the document clarifies expectations for risk ranking and identifies requirements for the content and format of hazard analysis documentation. Additionally, the document is used to implement recent changes in DOE requirements for developing and approving JCOs. The document currently applies to the Central Plateau Contractor and DOE has initiated the process for expanding its applicability to the Tank Farm Operations Contractor. The conversation was well supported by DOE and provided a good opportunity for the resident inspector to understand the full purpose, scope, and applicability of the document.

Tank Farms: A work team installed a slurry pump into single-shell tank AX-101. The contractor intends to start retrieval of AX-101 waste in mid-November. The tank contains approximately 375,000 gallons of waste, which is mostly saltcake. AX-101 is the only remaining AX Tank Farm tank with a substantial amount of waste. Of the other three tanks, AX-102 was declared retrieval complete on September 13. The other two tanks remain in a retrieval status while the contractor evaluates completion criteria.