

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 28, 2022

TO: Christopher J. Roscetti, Technical Director
FROM: B. Caleca, P. Fox, and P. Meyer, resident inspectors
SUBJECT: Hanford Activity Report for the Week Ending October 28, 2022

Tank Side Cesium Removal (TSCR) Process: The Tank Farm Plant Review Committee (PRC) met to discuss a revision to the justification for continued operation (JCO) that was put in place to support installation of necessary camera systems and to repair valve position indicators/valves to support completion of system blowdowns (see 9/30/2022 report). The JCO was necessary when operators could not, per procedure/safety basis, complete the blowdown, which is required by a specific administrative control for process enclosure entry. The JCO allowed entry for the installations and repairs but precluded breaching the system until a blowdown is completed. However, a recently discovered leak (see 10/21/2022 report) on a pressure detector also impacts their ability to perform a blowdown and must be repaired. The repair requires breaching the system by disconnecting and replacing connectors, tubing/piping, and potentially the detector. The proposed JCO revision will allow repair or replacement of any equipment or piping necessary to confine waste. The PRC voted to forward the JCO revision to the safety basis approval authority for review and approval.

Solids Waste Operations Complex: The contractor completed retrieval of several fuel casks from the low-level burial grounds and relocated them to the 200 Interim Storage Area (see 8/12/2022, 9/23/2022, and 9/23/2022 reports).

Waste Treatment Plant: Low-Activity Waste (LAW) Facility operations management held a fact-finding meeting to collect information related to a recent attempt to calibrate five thermostats. The thermostats control cooling units, which protect LAW Facility chemical safety equipment. Three of five thermostats failed their calibration, but the deficient conditions were not recognized by operations personnel for over two weeks. Additionally, the calibration criteria for the other two were subsequently determined to be incorrect. Consequently, operations personnel did not know the need to enter the appropriate abnormal operating procedure. Although the current plant status precluded any significant safety concern, the facts collected during the meeting indicate a need to improve coordination and communication between the facility maintenance and operations organizations while conducting chemical safety surveillance tasks. It was also apparent from the discussion that operations personnel need to improve their control of surveillance task approval and tracking. Additionally, some maintenance personnel may not understand the importance of a failed chemical safety equipment surveillance. In this case, the lack of understanding by maintenance personnel appears to have resulted in less than adequate communication of the calibration failures. Lastly, the event uncovered deficiencies in a surveillance procedure that had been walked through several times without the discovery of the deficient conditions.

Building 324: Facility management held a Hazard Review Board (HRB) chairperson review meeting to evaluate a change to a work package that a work team will use during an airlock entry to collect information to repair a hot cell crane. The review was thorough. The HRB chairperson will approve the change after review comments are addressed.