

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 7, 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 January 7, 2022

DNFSB Staff Activity: The resident inspectors and other members of the technical staff participated in a meeting held by the DOE Chief of Nuclear Safety with representatives from DOE ORP and the Tank Operations Contractor (TOC). The meeting continued discussions regarding proposed strategies for addressing fire and seismic hazards (see 7/30/21 and 12/3/2021 reports) at the 242-A evaporator facility. Most of the meeting focused on clarifying the approach and supporting analyses that the contractor intends to use to prevent or mitigate fire events that could damage safety-significant solenoids within the system that prevents flammable gas explosions in evaporator vessels. The group also discussed the basis for the contractor's seismic hazard control selection and how it would be protected within the technical safety requirements.

Hanford Site: Snow and ice impacted site operations resulting in the loss of three full shifts (one dayshift, one swing shift, and one midnight shift). Additionally, there was an early closure and a late report that impacted two other dayshifts, and an early closure for a swing shift.

DOE intends to start returning federal workforce personnel that have been teleworking during the COVID pandemic to the office on January 17. The return will be phased in three increments with the last increment scheduled to return on February 14. DOE will be providing return to work safety briefs for the personnel. DOE contractors will be implementing similar plans.

Central Waste Complex (CWC): The Central Plateau Cleanup Contractor briefed DOE field oversight and nuclear safety engineering representatives on the results of the root cause evaluation they performed to determine the reasons for their failure to perform adequate visual inspections of some waste containers that were stored at the CWC (see 7/23/2021 report). The inadequate performance of the surveillance requirement led to an inability to satisfy a Limiting Condition for Operation (LCO) that requires a visual inspection of containers to determine if they can be handled, moved, and disposed of without likely spread of contamination. The analysis team identified two root causes. First, there was a failure to adequately implement existing guidance related to specific administrative control formulation and implementation. This failure resulted in a flawed understanding by field personnel of the intent of the inspections and what was necessary to fulfill the surveillance requirement. The team also determined that the inadequate inspections were normalized over time resulting in a continuing failure to recognize the issue. Two contributing causes were also noted. A combination of numerous safety basis changes and project priorities stressed the process for safety basis revisions resulting in inadequate review of those changes. Additionally, they determined that existing guidance for implementing safety basis changes was less than adequate. The briefing also covered corrective actions to resolve the problems. The identified corrective actions result in changes to applicable procedures and will address the identified root and contributing causes. Additionally, the contractor will develop a lessons learned document that they will reference in appropriate procedures to help preclude similar issues in the future. Since some of the causes are rooted in procedures that are used across all Central Plateau Cleanup Contractor facilities, contractor safety basis personnel are also performing an evaluation of recent safety basis changes at other facilities to determine if any new LCO surveillance requirements are adequately implemented.