

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 21, 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 21, 2022

Plutonium Finishing Plant (PFP): The DOE Office of Environmental Management approved the Hanford Site's request for Critical Decision 4 for the cleanup of PFP, marking completion of the project. The PFP footprint will remain covered by a clean cap of soil and fixative. Contractor personnel continue to demolish ancillary structures outside the PFP fence line. Additionally, equipment used during demolition is being decontaminated or packaged as waste for disposal onsite.

Tank Side Cesium Removal (TSCR): The Tank Farm Operations Contractor completed final pre-start verification checks and placed the TSCR system in operations mode. If everything goes as expected, they expect to start sending pretreated low-activity waste to double-shell tank AP-106 during the coming week.

222S Laboratory: Contractor personnel self-identified that the fire suppression system used for the 11A hot cells did not have sufficient water to suppress a fire in the hot cell if the oil in windows, which is used for visual acuity, leaked into the hot cell. DOE-STD-1066, *Fire Protection* guidance allows the discounting of mineral oil in hot cell windows from combustible load estimates if oil remains in the window and if fire suppression is provided. However, the 11A hot cell windows have a known mineral oil leak, which may have invalidated the assumptions of the standard by not containing the oil. Facility personnel are working to screen this as a potential inadequacy of the safety analysis and have restricted additions of mineral oil to the hot cell windows.

Emergency Preparedness: COVID-19 and ongoing operations, along with the resulting limitations in personnel availability, have reduced the number of drills performed at Central Plateau Contractor managed facilities compared to prior years. This particularly affects facilities with smaller emergency management organizations. A resident inspector engaged with Central Plateau Contractor personnel to understand the impact of the reduced number of field drills on emergency response performance and any actions contractor management is taking to improve field performance. While the current number of field drills meets DOE requirements, efforts are being made to supplement field drills with additional training focused on emergency response for radiological control personnel.

Waste Treatment Plant (WTP): A resident inspector observed DOE-ORP personnel conduct the final oral examination of a Facility Representative (FR) candidate who will be assigned to oversee the WTP. The examination is the last step in the FR's qualification training, and focuses on knowledge of operations and safety systems, their roles and responsibilities, and the application of DOE directives to onsite work. The board's examination was rigorous, and the board voted to pass the candidate.