

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 13, 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 May 13, 2022

Pacific Northwest Site Office (PNSO), Radiochemical Processing Laboratory (RPL):

PNSO approved addenda to the RPL Documented Safety Analysis (DSA) and Technical Safety Requirements (TSRs). The addenda support the RPL Safeguards Limits Project, which installs secured Floor Storage Containers (FSCs) at RPL. The change includes a new safety system that is designed to prevent the accumulation of flammable gases within the FSCs. The change also implements a new Directive Action Specific Administrative Control (SAC) that ensures the material is correctly stored and that material quantities remain below levels assumed in DSA accident consequence analyses. PNSO's approval included two directed changes. The first clarifies the treatment of other fissionable isotopes that are not specifically identified in the SAC control. The second required DOE approval for recovery plans that may be required to remain compliant with the SAC. The contents of the addenda will be transferred into the main body of the DSA and TSRs during the next annual update of the documents following implementation.

Building 224B: Contractor personnel have been preparing to enter the facility's process cells as part of the facility's deactivation and decommissioning (D&D), including installation of supplemental ventilation and wooden access enclosures to the facility. Much of the preparations prior to these entries could be performed while the facility remained in a surveillance and maintenance (S&M) mode. However, recent work packages require a facility mode change from S&M to D&D prior to perform certain work activities. Unable to contact the shift office, the field work supervisor (FWS) decided to perform tasks they believed did not require D&D mode while waiting to contact the shift office. DOE personnel reviewing the latest revision of the package noted a prerequisite to enter D&D mode prior to performing work. The work package was suspended and work was paused. During a critique, participants identified that the work was being performed to a prior revision that lacked the D&D mode prerequisite. This indicated that work was performed to the correct released procedure, but that the procedure had allowed the FWS to decide what activities were allowed under the facility's safety basis without additional guidance in the work instructions. Participants also noted the difficulty for D&D projects to reach the shift office to initiate mode changes at the start of the day due to high call volume, and DOE and the workers have been engaged with identifying and revising multiple errors with the work package and approving a new revision prior to resuming work.

Liquid Effluent Retention Facility (LERF): The ORP Senior Review Board (SRB) met to review the draft Safety Evaluation Report (SER) and letter to the contractor for the proposed Documented Safety Analysis (DSA) submittal by the contractor (see 5/6/2022 report). The SRB discussed the differences in hazards and controls for the LERF Basins when solids removal work was being performed in basin 44 compared to future operations (see 10/23/2021 and 9/3/2021 reports). The SER letter approves the DSA with a condition of approval to add missing information to the Process Hazards Analysis, acknowledging that it would not likely impact the consequence calculations supporting the proposed DSA's control set. The SRB voted to approve the draft SER and cover letter.