

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 19, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: B. Caleca and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending February 19, 2021

Central Waste Complex: Facility personnel entered the container integrity limiting condition for operation (LCO) to address the condition of nine waste packages. The packages are a subset of a group of eighteen legacy containers that were originally placed on the facility's watch list over ten years ago for various reasons, such as minor vent abnormalities or minor container damage that did not require immediate corrective action. Although facility personnel have performed required TSR surveillances on the packages during their extended presence on the watch list, they did not identify corrective actions to address the deficient conditions. After discussions with DOE-RL, the contractor determined that it was time to re-evaluate the packages and update the associated action plans under the abnormal container management program, resulting in the LCO entry. The required evaluations are ongoing.

Direct Feed Low Activity Waste (DFLAW). Site management has established a phase gate decision process for the DFLAW program. This process divides the project into distinct phases which are separated by decision points known as gates. The gates delineate program transition points that, once implemented, have limited recovery paths (e.g., melter heat up). Prior to reaching each gate, a team will perform a review of readiness to proceed to the next phase. Based on that review, and a recommendation from the DFLAW Program Manager, the Hanford Manager will then decide whether to transition to the following program phase. A review of documents related to this effort determined that site leadership does not intend for this process to replace or modify the readiness verifications required by DOE O 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*. Rather, they have decided that a more holistic approach to mission critical decisions is necessary because the DOE O 425.1D process is designed for single facilities and does not adequately address the complexity and interdependencies resulting from the numerous site elements that support the DFLAW effort.

Liquid Effluent Retention Facility (LERF): Contractor personnel held a control decision meeting to discuss proposed safety-related controls for eventual incorporation into the LERF safety basis (see report for week ending 3/20/2020). Nuclear safety personnel proposed one safety-significant specific administrative control, which would protect assumptions regarding key waste characteristics. The quorum members concurred with the proposal.

Waste Treatment Plant (WTP): DOE-ORP kicked off an audit of the adequacy, implementation, and effectiveness of the contractors quality management systems for engineering, procurement, and construction, and for commissioning and operations.

Tank Farms: The Senior Review Board (SRB) met to consider a tank farms Documented Safety Analysis amendment that addresses a positive Unreviewed Safety Question (USQ) determination related to universal joints for gear-actuated isolation valves (see 11/6/2020 report). This amendment addresses the potential for invalid position indication of safety-significant valves that could result from a failed universal joint by requiring the use of cameras during valve positioning. The SRB recommended approval of the amendment. This amendment is not applicable to similar valves in the 242-A evaporator since that facility is under a separate DSA.