

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 26, 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 26, 2021

**DNFSB Staff Activity:** Members of the technical staff met with DOE-RL and Central Plateau Cleanup Company personnel for the third in a series (see 11/20/2020 and 2/12/2021 reports) of discussions that support a technical staff review of the approach used by DOE to control hazards at the Central Waste Complex.

**Tank Farms:** While using a crane to remove a top hat assembly on a C-111 tank riser to allow its use for installation of an Enraf level detector, workers noted that a long section of pipe was present in the riser and attached to the top hat. This configuration was unexpected. The workers placed the system in a safe condition with the lift crane providing support to a portion of the irregularly shaped top hat assembly, stopped work, and exited the tank farm. Tank Farm operations restricted access to the farm and entered the appropriate abnormal operating procedure. A subsequent investigation determined that a system modification that had previously placed a 36 foot pipe into the tank at the riser had been missed during the work planning process. A recovery plan was developed and workers entered the tank farm to build a support scaffolding for the top hat assembly, allowing removal of the crane. Work will resume after it has been re-planned to account for the existing condition.

**Central Plateau Risk Management (CPRM):** Contractor management held an In-Progress ALARA Review (IPAR) after an individual noted that three entries into building 203A to perform characterization work were performed without establishing required high contamination area/airborne radioactivity area (HCA/ARA) postings. The requirement to establish an HCA/ARA in the facility was added to the work instructions after workers encountered conditions that exceeded allowed contamination levels during a facility entry earlier this year. During the IPAR, the field work supervisor (FWS) initially stated that he had been aware that a revision to the work instruction was expected, but did not know it had been released, contrary to the release sheets for the revision reviewed by the contractor after the IPAR. The FWS did acknowledge he did not brief the change or its requirement to establish the HCA/ARA boundaries during the pre-job briefing. The work planner responsible for the change stated that, while he felt that he should have notified the FWS, there was no requirement to do so. Consequently, the work team did not use the required controls, such as air sampling, during the entry. The FWS also stated that, since no contaminated systems were breached, he did not believe that the controls, which were identified for “characterization activities,” applied to the radiological surveys performed during the entries. Contractor management noted that radiological surveys are considered characterization work and that the unknown radiological conditions in the facility warrant the added controls. The resident inspector notes that, since this meeting was not a critique, a detailed timeline of events was not established making it difficult to identify the cause of the event. The contractor is performing an apparent cause evaluation to determine the causes of the event and any appropriate corrective actions, as well as an extent of condition review to identify any similar issues in other CPRM work packages. Due to required industrial hygiene hazard controls for the work, all entries were made with the same respiratory protection that would be expected for ARA entries; as a result, there are no suspected uptakes of airborne contaminants.