

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 7, 2020

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** M. Bradisse, B. Caleca and P. Fox, Hanford Resident Inspectors  
**SUBJECT:** Hanford Activity Report for the Week Ending August 7, 2020

**DNFSB Staff Activity:** M. Bradisse has arrived onsite to commence his 120 day detail assignment as a resident inspector.

**Tank Farms:** In February, during a routine video inspection of the interior of single-shell tank SX-112, Tank Farm Operations Contract (TOC) personnel discovered that concrete had spalled from three locations in the tank's dome. The condition was evaluated under a potential inadequacy of the safety analysis (PISA) and they determined that it was not an unreviewed safety question (USQ). This week, as a result of performing follow-on extent of condition inspections of other tanks, TOC personnel reported the discovery of spalling in tank SX-109. The spalling is also located in the tank dome and is in a similar radial location as the spalling discovered in SX-112; the affected area in SX-109 is approximately twice the size of the largest area found in SX-112. TOC nuclear safety personnel have reviewed the condition in SX-109 and determined that it is covered by their previous USQ determination for SX-112. Consequently, they will not open a new PISA. TOC personnel are continuing their extent of condition checks of additional SX Farm tanks and engineers are performing a detailed structural analysis to determine the overall effect of the conditions found on the structural integrity of the tanks.

**Waste Treatment Plant (WTP):** A resident inspector observed a tabletop drill that was conducted as part of the WTP contractor's ongoing preparations for operations in support of the DFLAW mission. They are using tabletop drills as their starting point for training their emergency response organization and will soon transition to walk-thru and coached drills. Fully evaluated drills will follow. The format provided a useful opportunity to discuss roles and expected actions within the new emergency response organization.

**Central Plateau Risk Management (CPRM):** A resident inspector observed a Hazard Review Board (HRB) meeting that was held to review a work package that workers will use to install a new power supply for the ventilation fans that provide confinement for the REDOX canyon. The new power source will also support planned efforts to take the facility cold and dark by allowing the future installation of a new ventilation system that can better support risk reduction activities inside the facility. As an outdoor activity, the primary hazards are vehicle use, hazardous energy controls, and heat stress, though the HRB also thoroughly discussed all other hazards including radiological and COVID-19. While the work crew was knowledgeable of the work instruction, and their roles and responsibilities, the HRB voted to reject the work package due to poor quality of the supporting documentation and permits. The HRB was thorough in its review of the work.

**Hanford Site:** DOE and site contractors remain in the first phase of their COVID-19 pandemic response resumption plans. Site leadership continues to evaluate state and regional data and trends, and consult with regional health and municipal authorities prior to implementing any planned onsite workforce increases.