

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 15, 2021

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** B. Caleca and P. Fox, Hanford Resident Inspectors  
**SUBJECT:** Hanford Activity Report for the Week Ending January 15, 2021

**Aging Structures Stabilization:** The project team completed grout addition to the 216-Z-9 crib. This completion ensures stability of the structure and isolates material at risk from an atmospheric release path. This represents a significant onsite risk reduction by preventing any radiological release that would have been associated with a structural collapse of the crib.

The contractor held a Hazard Review Board (HRB) to review work instruction changes for investigation of the 216-Z-2 crib structure. Earlier grout stabilization efforts of the crib were put on hold when an obstruction was identified in its main riser (see 11/13/2020 report). The revised investigation package will inspect a well riser that could be used as a contingency grout path and then attempt to free the obstruction, which would be then lowered into the crib using a chain hoist. The HRB approved the modification to the work instructions.

**Building 324:** The DOE safety basis for the facility implements a Technical Safety Requirement (TSR) administrative control (AC) key element that requires a surveillance that is designed to prevent the accumulation of transient combustible material. The function of the control is to reduce the likelihood of a fire in the confinement structure and subsequent propagation of the fire from the gallery into a hot cell. Contractor performance assurance personnel determined that the surveillance was not performed in the fourth quarter of 2020. However, at the time, facility operators were not aware that the surveillance was missed. A subsequent evaluation determined that the surveillance did not occur because facility personnel were not available on the originally scheduled date to support the fire protection engineer evaluation because of staffing shortages resulting from COVID-19 quarantines. They did not subsequently reschedule the surveillance. Although the surveillance did not occur, DOE and the contractor determined that the failure was not a violation since the single failure did not constitute a trend of non-compliances that was indicative of a program failure. Additionally, although the control is used to reduce the likelihood of a hot cell fire, they did not consider the single failure substantial enough to render the safety basis summary invalid. The resident inspectors note that, since the safety basis and TSRs were developed under earlier standards, the content and construct of the TSR does not provide clear expectations for performance of the required surveillance, or provide a clear basis for performance evaluation and enforcement of the requirement.

**222S Laboratory:** The contractor held a drill at the facility during a swing shift. The format was a variation of an incident command post limited drill, with a tabletop format for the “field” that allowed involvement and proficiency evaluation of the chemical hazards assessor, radiological hazards assessor, and facility operations specialist, as well as incident command post personnel. The drill also implemented revised COVID-19 controls including the mandatory use of new disposable surgeon’s masks or N95 masks instead of personally provided face coverings. Overall drill performance was strong and participants provided important feedback regarding effective event response with limited staffing.