DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 18, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: B. Caleca and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending January 18, 2019

PUREX Facility: The contractor completed the modification and movement of grout placement equipment (see 1/4/2019 report) to support continued stabilization of Storage Tunnel 2. They have resumed grout placement and are on track to complete the stabilization in March.

Electrical Distribution at Onsite Facilities: Ongoing extent of condition reviews that the contractor is performing after the discovery of underrated electrical isolation breakers at 105 KW basin (see 1/11/2018 report) revealed similar issues at T-Plant and at the 400 Area Maintenance and Storage Facility. The contractor has evaluated the situation at both 105 KW basin and at T-Plant and has determined that the conditions found do not result in a PISA. The contractor continues to evaluate options to remediate the conditions.

242-A Evaporator: The resident inspectors observed an incident command post (ICP) limited drill involving a security event at the 242-A evaporator facility. The drill was executed in a professional manner, identifying some areas of improvement in implementing ICP checklists but noted a strong unified command and good three-way communication among drill participants.

Building 324: The contractor held an In Progress ALARA Review (IPAR) for a work event where radiation levels above Radiological Work Permit (RWP) limits occurred during the removal of a failed camera from the B-cell in the Radiological Engineering Complex. Although radiation levels throughout the evolution were higher than expected, the work team felt that they would level off and continued to incrementally remove the camera. On the last increment, the radiation level doubled, exceeding the RWP radiation limit by 80%. The IPAR discussion revealed opportunities for improved planning and a need for the work team to apply a more conservative thought process and increased control when approaching established limits. Additionally, the discussion indicated that some workers in the facility do not have a firm understanding regarding procedures for the use of temporary and short-term shielding.

Plutonium Finishing Plant. The contractor's Hazard Review Board (HRB) met to review the project team's readiness to perform activities to prepare a 20,000 cubic feet per minute exhauster for use in support of the demolition of the 234-5Z A and C process line areas. The exhauster will be placed on one end of a process line while demolition starts and proceeds from the opposite end. This practice is intended to create a path for air flow that will allow capture of airborne contamination that occurs as a result of demolition in the exhauster high-efficiency particulate air (HEPA) filters. The exhauster was previously used for the same purpose during demolition of the Plutonium Reclamation Facility. Consequently, the primary purpose of the work package is to change out the exhauster's highly contaminated HEPA filter media. The HRB was effective and identified a number of comments related to contamination control and work methods, area radiological monitoring, and limits related to environmental conditions. The HRB also noted that the work method and control set relied heavily on a number of assumptions and that, in some cases, the assumptions could be validated or resolved with minimal additional work.