

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 31, 2018

TO: Christopher J. Roscetti, Technical Director
FROM: P. Foster and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending August 31, 2018

DNFSB Staff Activity: P. Fox was offsite to participate in a review activity at DNFSB headquarters. D. Cleaves was onsite to perform resident inspector support activities.

Plutonium Finishing Plant (PFP): The contractor held an operational drill to fulfill a pre-start requirement resulting from DOE's evaluation of the contractor Management Assessment that was performed to determine the contractor's readiness to resume low hazard demolition activities (see 8/17/18 report). The drill scenario involved a truck that picked up an Environmental Restoration Disposal Facility (ERDF) roll on/roll off container filled with radiological debris for delivery to ERDF. As the truck was leaving the Container Transfer Area, liquid is noticed coming from the container. The drill required the work team to exercise communications and coordination, respond with a properly equipped team, apply ALARA principles, establish protective boundaries, and develop a plan for surveying the scene.

Removable contamination was found on a truck that was moved from PFP to another onsite facility for servicing. Management held an in-progress ALARA review to discuss the event. They determined that, during the pre-movement survey, radiological control technicians (RCTs) identified fixed contamination on the vehicle's exhaust system. The contamination was documented on the radiological tag that traveled with the vehicle. When RCTs repeated the survey at the garage, removable contamination was identified at that prior survey location. The contractor is evaluating their vehicle release survey procedures.

324 Building: A Resident Inspector observed a work team perform a trial run of the procedure that will be used to install the Through Support Assembly (TSA) for a Remote Excavator Arm (REA) that will be used to remove the contaminated soil from below the B hot cell. The team performed the demonstration at the 324 Mock-Up Facility. Early in the trial run, contractor management terminated the exercise when they determined that the effectiveness of the exercise was limited because the procedure contained too many For Simulation Only (FSO) steps. The team subsequently determined that additional work steps could be fully performed in the mock-up facility and revised the procedure to include the additional steps. The demonstration resumed later in the week and the project team successfully completed two of the procedure's tasks. The exercise allowed the team to identify several potential modifications to both equipment and procedures that may increase efficiency and reduce worker radiological exposure.

PUREX Plant: The contractor Hazard Review Board (HRB) met to evaluate a work instruction that will be used to stabilize Storage Tunnel 2 with grout, as well as the team who will perform the work. The Resident Inspector noted that the field work supervisor displayed good knowledge of the procedure, as well as other aspects of the planned stabilization activity. The HRB approved the work package with comments. In addition, the Resident Inspector also observed a test placement of the grout that will be used to fill the tunnel. The exercise demonstrated the operability of the recently installed onsite grout batch plant.