DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Christopher J. Roscetti, Technical Director
FROM: P. Foster and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending October 19, 2018

DNFSB Staff Activity: P. Fox was offsite. M. Bradisse was onsite to perform oversight support activities.

Plateau Remediation Contract: The CHPRC Executive Safety Review Board (ESRB) met to review the causal analysis developed as a result of the contaminated rigging equipment removed from the Plutonium Finishing Plant (PFP) (see 8/10/18 report). The analysis pointed to multiple breakdowns in communication and failure to follow standard operating practices regarding the transfer of equipment between projects on the site. As a compensatory measure, PFP has issued a standing order to formalize the movement of equipment out of radiological areas. CHPRC senior management is in the process of coordinating a formalized response across the site, as this vulnerability is larger than a single contractor. The ESRB also discussed two events related to rocks being propelled near unprotected workers during the movement of heavy equipment during soil and groundwater remediation activities. The discussion focused on the importance of maintaining unpaved surfaces on the site and ensuring personnel operate at a safe distance from heavy equipment. The ESRB provided comments for each causal analysis and the revised reports will be resubmitted to the chair for approval.

222-S Laboratory: The contractor held an evaluated incident command post (ICP) limited drill at the 222-S laboratory. The scenario postulated a crane operator suffering a heart attack while driving along the north side of the laboratory and subsequently hitting several power poles, the corner of the 219-S building, and finally crashing through the north wall of 11A, the location of the hot cell lab in 222-S. Following the drill, the assessment team discussed issues related to communications, command and control, and drill conduct during the controller's hotwash.

Tank Farms: The contractor recently completed implementation of several approved changes to the Tank Farms DSA and TSRs. These changes support use of wireless technology to transmit signals from safety-significant monitoring equipment inside the Tank Farms to a central control room. They also support implementation of new safety-significant liquid level detectors in the double shell tank (DST) annuli, fulfilling action 3-1 of the implementation plan for DNFSB Recommendation 2012-2. The wireless infrastructure will further support the planned implementation of safety-significant real time DST ventilation flow monitoring, which is planned to fulfill actions 2-3 and 2-4 of the implementation plan.

Soil and Groundwater: Contractor management held a critique to discuss the facts related to work being performed on an extraction well without the worker applying their lock to the existing lockout/tagout (LOTO) boundary. Discussions included a number of potential causal factors including informal handover of field supervisor responsibilities and the need to maintain an expanded LOTO boundary throughout the evolution of the work package. The critique also recommended multiple process improvements including increased field supervision to help prevent reoccurrence of this type of event.