DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 9, 2018

TO: S. A. Stokes, Technical Director FROM: P. Fox, Hanford Resident Inspector

SUBJECT: Hanford Activity Report for the Week Ending February 9, 2018

DNFSB Staff Activity. M. Bradisse was onsite to provide Resident Inspector support.

Solid Waste Operations Complex. A technical safety requirement (TSR) violation occurred when operations personnel failed to enter a limiting condition for operation when they discovered a degraded waste drum during a routine TSR surveillance. Based on information provided during a critique, they identified a potential need to improve reporting of abnormal conditions, DSA change implementation, and operator knowledge of TSRs.

Plutonium Finishing Plant (PFP). Facility personnel continue to have difficulty in controlling contamination spreads. Contamination has been found outside of the established contamination control boundaries on four separate occasions during their recovery from the December contamination spread events (see Activity Report 12/22/2017). One of the cases resulted in alpha contamination above the high contamination area level threshold in a non-radiologically controlled location. The contractor recognizes the adverse trend and has scheduled a critique to investigate the causes of the individual events. They intend to use results from the critique to identify additional controls necessary to eliminate the ongoing problems.

Tank Farms. The contractor completed the installation of real time ventilation flow monitoring equipment in AW farm. This action supports completion of phase 2, action 2 of their implementation plan (IP) to address the Board's 2012-2 Recommendation which states a need to improve the tank farm flammable gas safety strategy. They expect to complete the remaining flow monitor installations (AY/AZ farms) in March. They are also establishing remote readout for the flow indicators as identified in phase 2, action 3 of the IP. They will process the related DSA modification after they complete the installations and establish remote readout.

Building 324. Workers backed out of cleanup work in Radiological Engineering Complex (REC) C-Cell when they discovered alpha contamination levels that exceeded the void limits of their radiological work permit. The contractor conducted an in-progress ALARA review. Based on the results of the review, they determined that they needed to perform additional investigation to understand the source of the contamination and ensure that existing work controls are adequate to prevent any spread of contamination and to protect workers.

The contractor Hazard Review Board (HRB) met to review documents that support characterization work in the highly contaminated B-Cell of the REC. This characterization is necessary to allow future grouting and coring activities. The HRB determined that additional planning work is needed and rejected the work documents.

Tank Side Cesium Removal (TSCR). In January, the Tank Farm contractor released their request for proposals for the design and construction necessary to complete the TSCR demonstration project. Vendor bids are due on March 5, 2018.