DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 10, 2017

TO: S. A. Stokes, Technical Director

FROM: P. Fox and D. Gutowski, Hanford Resident Inspectors

SUBJECT: Hanford Activity Report for the Week Ending November 10, 2017

Staff members L. Schleicher and Y. Li were on site to observe the annual update meeting for the ORP Volcanic Ashfall Hazard Characterization Project. A. Martin was on site performing Resident Inspector augmentation activities.

Plutonium Finishing Plant (PFP). The contractor has revised their hazard control set and resumed demolition of the Plutonium Reclamation Facility (PRF). PRF demolition was paused after a significant contamination release occurred during removal of a second floor gallery glovebox (see Activity Report 6/9/2017). In addition to retaining previous controls, the revised hazard controls include the installation of a HEPA filtered ventilation system that will be used to direct and filter PRF canyon air flow during demolition. Additionally, the demolition boundaries have been expanded, and support facilities have been moved away from the demolition zone. The contractor has also added additional ground based foggers and continuous air monitors. Lastly, the contractor has removed a substantial portion of the 234-5Z facility near PRF. The removal reduces the wind tunnel effects that accelerated wind speed and increased variability of the wind pattern near the structure and is expected to improve the effectiveness of fogging activities designed to control the release of contamination. This week's demolition efforts focused on the removal and packaging of additional gallery gloveboxes from the PRF.

Tank Farms. The contractor completed C-105 retrieval operations. This action finishes retrieval operations for the C tank farm.

The contractor performed a transfer from AP-102 to AP-106 to support a level rise authorization for AP-106. A second transfer was also performed from AP-106 to AW-102 after the level rise test was complete to reduce AP-106 level and to stage waste for a future evaporator campaign. Upon approval, AP-106 will be the seventh tank in AP farm to have its normal operating limit increased from 416" to 454" (see Activity Report 8/14/2015).

The contractor completed their analysis and corrective actions related to a PISA that identified the application of non-conservative setpoints to some wide range differential pressure transmitters that were used to demonstrate compliance with surveillance requirements contained in the Tank Farms Technical Safety Requirements (see Activity Report 3/18/2016). They submitted their final Evaluation of the Safety of the Situation which was subsequently approved by ORP. All related operational restrictions have been lifted.

105-KW Basin. The Sludge Treatment Project Team reported successful completion of their post installation performance acceptance testing of the Engineered Container Retrieval and Transportation System. This action concludes the construction phase of the project for the 105-KW Basin and the system has been turned over to operations. The contractor is now finalizing their preparations for the contractor operational readiness review, which is expected to occur in December.