DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 17, 2020

TO: Christopher J. Roscetti, Technical Director

FROM: B. Caleca and P. Fox, Hanford Resident Inspectors

SUBJECT: Hanford Activity Report for the Week Ending April 17, 2020

DNSB Staff Activity: Members of the staff held a teleconference to discuss DOE's implementation of 10-year seismic hazard reviews and incorporation of Probabilistic Seismic Hazards Assessment results into facility safety analyses. The discussion was supported by contractor subject matter experts (SMEs) as well as individuals from DOE Headquarters and DOE's Hanford site Richland Operations Office and Office of River Protection.

Hanford Site: Hanford site DOE and contractor management continue to follow federal and state guidance to reduce the transmission of the novel coronavirus disease (COVID-19) (see 4/10/2020 report). The Richland Operations/Office of River Protection manager has extended the current essential mission critical operations posture through next week. Activity on site is increasing in order to support the planning necessary to enable the eventual resumption of work. Planning activities include evaluation of facilities to identify work practices or facility modifications that may be necessary to allow the continued implementation of social distance and enhanced sanitation practices as workers transition back to the site. Ongoing efforts also focus on developing criteria for phased work resumption, prioritization of work activities, and sequencing and coordinating work resumption activities for the various site contractors.

Direct Feed Low Activity Waste Interface Coordination: The production of vitrified Low Activity Waste (LAW) requires significant coordination between the Tank Farm Operations Contractor (TOC) and the Waste Treatment and Immobilization Plant Contractor to ensure that safety analyses and processes on both sides of the interface will result in safe operations. DOE is leading efforts to ensure that identified interface issues are addressed. Some examples of significant topics that DOE is addressing include the potential for hydraulic transients resulting from closure of valves within WTP LAW facility systems causing damage to Tank Farm systems and assurance that feed from the Tank Farm to the LAW facility will meet the waste acceptance criteria (WAC) that protects the LAW facility hazard categorization. As a result of these efforts, the TOC has performed calculations that indicate that the hydraulic transients from rapid closure of LAW facility system valves will not result in pressures that will damage Tank Farm systems. Discussions regarding sampling requirements to assure WAC are met are still ongoing.

Plutonium Finishing Plant (PFP): This week, contractor personnel performed their first monthly entry to perform surveys and apply fixatives to the PFP demolition area following efforts to reconfigure facilities to accommodate social distancing guidance (see 4/10/2020 report). A facility representative and a General Services Support Contractor SME observed related activities. In order to conserve personal protective equipment for higher priority activities, their observations were performed without entering any contamination areas. A resident inspector also remotely observed the pre-job meeting for personnel performing the work activity and did not observe any issues with the topics discussed, which included the need to perform self-surveys with hand held equipment or be surveyed by radiological control technicians wearing face masks since personnel contamination monitors are not operating.