

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 9, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: B. Caleca and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending April 9, 2021

Waste Treatment Plant (WTP): The WTP contractor notified DOE that they have completed the Effluent Management Facility (EMF) Startup Testing Completion milestone. That means that they consider component and system testing for scoped systems within the EMF boundaries complete, and that plant operations has accepted turnover of those systems.

The DOE safety basis approval authority (SBAA) approved a revision to the High Level Waste Facility Preliminary Documented Safety Analysis (see 3/26/2021 report). There was one condition of approval that requires the contractor to revise the document to provide a justification for cases where they used administrative controls in lieu of engineered controls to prevent or mitigate hazards, but had not previously provided a basis for the decision.

Liquid Effluent Retention Facility (LERF): Facility personnel have been operating LERF Basin 44 under a justification for continued operations (JCO) since they determined that the presence of solids within the basin represent a positive unreviewed safety question (USQ). The JCO has allowed them to continue their preparations for replacement of the Basin 44 cover while they develop a Documented Safety Analysis to support upgrade of the LERF facility from a radiological facility to a hazard category 3 facility to address the positive USQ (see 10/23/2020 report). They are nearing the completion of the preparation work. This week, the contractor's Plant Review Committee (PRC) met to discuss a revision to the JCO that would allow them to expand work scope to include cover replacement. That work includes cutting up and removing the existing cover, removing solids from the basin, and installation of the new cover. The most significant change in the revised JCO is a loosening of controls related to fueled equipment around the basin. Those controls exist to prevent fires that could impact the contaminated cover, liner, and solids in the basin. In the revised JCO, the allowed quantities of fuels are substantially larger than the amount allowed under the original JCO. The PRC voted to recommend submission of the revised JCO to the DOE SBAA for approval.

Plutonium Finishing Plant (PFP): The contractor tested demolition equipment and, on Wednesday, briefly resumed demolition activities within the high contamination area (HCA). However, because of high winds, demolition activities were paused for the remainder of the week. Current work is focused on cleanup of miscellaneous waste and structures inside the HCA. A resident inspector observed the HCA work activities; no issues were identified.

PFP management held an in progress ALARA review after pre-job surveys of an excavator in a contamination area (CA) found contamination on a tire that exceeded the CA limits for alpha contamination. Personnel noted that this excavator had previously been used in the HCA before it was surveyed and moved to the CA the previous week. Workers noted that surveys of vehicles exiting the HCA are not as comprehensive as surveys performed on smaller piece of equipment, and there is no defined protocol for decontaminating vehicles that are moved from the HCA to the CA. Project managers are currently reviewing project practices for the survey of heavy equipment from the HCA. The excavator was returned to the HCA after removal of the contamination.