

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 20, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: B. Caleca and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending March 20, 2020

Hanford Site: Federal and contractor management are following federal and state guidance to reduce the transmissibility of the novel corona virus (COVID-19). This includes transitioning several thousand workers to telework status as well as isolating and disinfecting office space where personnel who reported symptoms were located. The contractors have also stopped work on all fieldwork not associated with technical safety requirements, environmental compliance, emergency response, or placing facilities and equipment into safe/layup condition to address employee concerns regarding COVID-19 transmissibility. The stop work will remain in place until the logistics of performing work with proper hygiene and social distancing measures are developed and adequately communicated to the workforce.

Liquid Effluent Retention Facility (LERF): The Tank Farm Operations Contractor (TOC) previously declared a potential inadequacy in the safety analysis when they discovered contaminated sludge material in LERF basin 44. The presence of the sludge invalidated the results of the analysis that determined that the facility was a less than hazard category 3 (<HC-3) (see 7/19/2019 report). The TOC has completed a new hazard categorization analysis. The initial categorization determined that, based on maximum permitted facility inventory, the facility material-at-risk exceeds HC-3 threshold quantities. However, in the final categorization, after allowed adjustment of the threshold quantities using a credible bounding accident release fraction, the facility remains <HC-3 in its current configuration. Based on the results of the analysis, the TOC determined that the unreviewed safety question determination (USQD) is negative. The TOC has submitted the document to DOE-ORP for approval. Compensatory measures remain in place pending DOE-ORP approval of the analysis. However, based on the negative USQD, the TOC will request an adjustment that will allow project activities related to repair or replacement of the basin 44 cover and installation of the transfer line which supports startup of the Waste Treatment Plant Low Activity Waste (LAW) facility. Although, based on current process streams, the LERF remains <HC-3, the TOC anticipates that they will need to upgrade the facility to a HC-3 and develop a supporting documented safety analysis prior to startup of the LAW facility.

Building 324: The resident inspectors attended recently developed project-specific radiological work training for Building 324 personnel. The contractor developed the course as part of its corrective actions to address past radiological events (see 3/6/2020 report). The course covers the facility's history, radionuclide inventory, and typical personal protective equipment used for high hazard nuclear work. The training also covered contamination control practices, including performing decontamination, and provided an understanding of basic radiological control practices. The instructors were experienced, and used practical demonstrations to involve students in the training. Although this was a facility-specific training, the resident inspectors note that the training is applicable for any radiological work at the site, and that other individuals would benefit if similar material was included as part of initial radiological worker training. Contractor personnel are currently working on task-specific and higher hazard radiological training to support airlock and room 18 work in high contamination areas.