

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 25, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: M. Bradisse, B. Caleca and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending September 25, 2020

Pacific Northwest National Laboratory, Radiochemical Processing Laboratory (RPL):

Facility management determined that a technical safety requirement (TSR) non-compliance occurred when an individual drove a fuel truck into an exclusion area near the head of a ramp leading to the basement of the RPL. The truck had a bulk storage fuel tank with a capacity of 1000 gallons in addition to the 100 gallon capacity in the vehicle fuel tanks. However, an existing TSR-level control precludes fuel quantities above 500 gallons in the exclusion area. The control exists to prevent larger quantities of fuel from flowing down the ramp, overflowing a berm, and entering the basement. A fire resulting from subsequent ignition of a fuel pool in the basement could impact a large percentage of the facility. Although the bulk and vehicle fuel tanks actually contained less than 325 gallons of fuel, facility management determined that a non-compliance still existed since it was a matter of happenstance that the tanks did not contain more than 500 gallons. Aside from human error, discussion during the critique meeting also noted potential room for improvement in the implementation of the control. Facility personnel are performing a causal analysis to identify corrective actions to preclude similar future events.

Plateau Remediation Contractor (PRC): DOE-RL directed the PRC to remove recovery plans from the safety bases of all existing facilities during their respective annual update or revision. The direction noted that the contractor's use of recovery plans is inconsistent between facilities and is not consistent with DOE safety basis implementation guidance. DOE-RL also noted that the PRC's implementation of risk ranking in support of their hazard analyses is also inconsistent between facilities and not adequately documented. Similar to their direction regarding recovery plans, DOE directed the PRC to update their risk ranking tables during the next annual update or revision of the safety bases for all facilities managed under the contract.

Tank Side Cesium Removal (TSCR): The TSCR system process, control, and ancillary enclosures were all delivered on Saturday and anchored to the balance of facilities pad. Concrete has also been poured for a second section of the forklift transfer path, with rebar and formwork installation for a third section planned for the near term.

Building 324: Facility personnel held a full demonstration of its proposed high contamination area training for facility workers. First-line supervisors were the first to receive the training so they could provide knowledgeable feedback about the course material and related mockup demonstration. A resident inspector observed the event and noted that the participants provided valuable feedback. Based on input from participants and DOE observers, facility personnel will make additional changes to mature the course prior to rolling it out to the workforce.

Tank Farms: DOE extended the current Tank Farm Operations Contract for another year to September 30, 2021. The extension allows tank farm operations to continue until DOE completes actions necessary to award the follow-on Tank Closure Contract (see 5/29/2020 report).