

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 29, 2018

TO: Christopher J. Roscetti, Technical Director
FROM: P. Foster and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending June 29, 2018

DNFSB Staff Activity: R. Rosen was onsite to attend a Tank Integrity Expert Panel meeting.

T-Plant: The first sludge transport and storage container (STSC) was safely emplaced in the T-Plant canyon this week (see 6/22/2018 report). While the actual movement went smoothly, this inaugural operation did identify some procedural weaknesses with activities associated with venting and purging the STSC. The contractor plans to hold a formal post-job after the holiday to discuss these observations.

242-A Evaporator: The contractor started evaporator campaign nine. However, they subsequently terminated the campaign and placed the facility in shutdown mode when a high vibration condition could not be cleared on the recirculation pump. Contrary to the alarm response procedure, the facility operators ran the pump for a substantial period of time with the high vibration alarm activated. They initiated the shutdown after the DOE-ORP facility representative pointed out the error. Contractor management is evaluating options for repair or replacement of the pump and is investigating the cause of the procedure non-compliance.

Plutonium Finishing Plant: Contractor management had closed a number of work trailers when they became part of the contaminated area resulting from the December contamination spreads (see 12/22/2017 report). This week, while reviewing paperwork that was being recovered and radiologically released from the trailers, waste management personnel determined that a drum that was designated transuranic (TRU) waste had been stored under conditions that were not compliant with the facility material management specific administrative control. They subsequently established appropriate controls for the drum until a non-destructive assay determined that the contents met the requirements for low level waste. Based on that information, they changed the drum designation removing the need for TRU waste controls.

216-Z-9 Waste Storage Crib: Contractor nuclear safety analysts completed the USQ determination for the PISA that documents an error in the material-at-risk information recorded for a design basis accident in an unimplemented revision of the DSA (see 6/22/2018 report). Since the DSA was not implemented, they determined that a USQ does not exist. The contractor will correct the error and submit another revision of the DSA for DOE-RL approval.

Building 324: While moving a manipulator to support maintenance training at the Building 324 mockup facility, the wheels of its cart struck an obstruction and the cart and manipulator up-ended with the manipulator striking the floor. During the critique of the event, the attendees noted that the carts are difficult to move as the manipulator is longer than the cart and weighs approximately 1200 pounds. The movement of the cart was not expected to be necessary for this training and the hazard was not briefed to the workers during the pre-job. Contractor management has suspended manipulator movements at the mockup facility pending the identification of corrective actions.