

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 12, 2020

TO: Christopher J. Roscetti, Technical Director
FROM: B. Caleca and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending June 12, 2020

DNFSB Staff Activity: Members of the staff met with ORP and Tank Farm Operations Contract personnel to discuss proposed changes in their strategy for addressing remaining issues identified in a Board letter dated June 18, 2014 regarding fire and seismic event hazard controls at the 242-A evaporator (see March 13, 2020 report).

Tank Farms: Operations personnel noted two unexpected level indication changes in double-shell tank SY-103. The first was a one inch level drop on June 1 followed by a one-half inch level rise on June 9. They subsequently entered their abnormal operating procedure for unexpected tank level changes. Follow-up investigation by a tank farm operations team determined that the weight of the displacer used in the level indication system was higher than expected indicating plating or accumulation of dried waste on the displacer. Variations in weight can affect the system's capability to measure level. The team rinsed the displacer to remove the accumulation and, after placing the system back in service, the indicated tank level returned to a value slightly above the June 1 value. However, the contractor remains in the abnormal operating procedure for SY-103 pending completion of an engineering evaluation of the event.

Waste Treatment Plant (WTP): The ORP Senior Review Board (SRB) met to evaluate a WTP contractor proposal to cancel the General Volume of the WTP Preliminary Documented Safety Analysis (PDSA). Under the proposal, the information contained in the canceled general volume will be retained in an engineering report. Information from the engineering report would then be transferred into the facility specific PDSAs during routine updates. The SRB recommended approval of the proposed approach.

The WTP contractor is continuing their work to update hazard analyses (HA) that support Low Activity Waste Facility chemical safety management program implementation and High Level Waste Facility design. Over the last two weeks, they have kicked off HA reviews of the HLW Facility melter offgas treatment process and the ammonia reagent system.

105KW Basins: Contractor personnel kicked off a HA that supports disposal of the 105KW basins. The disposal work will occur once media from the garnet filter is placed in containers using a process similar to that used for removal of basin sludge and then transferred to T-Plant. High-dose items currently in the basin will be size reduced, placed in engineered containers, and grouted. That material will be treated as remote-handled transuranic waste. The basins will be dewatered and stabilized with grout prior to their removal. Personnel supporting the HA have experience with similar previous activities, such as closure of the 105KE basins.

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 6/5/2020 report). RL, ORP, PNSO, and all contractors remain in the first phase of their resumption plans. Only minor increases in onsite staffing are expected next week.