

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 8, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: B. Caleca and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending November 8, 2019

Plutonium Finishing Plant (PFP): Contractor personnel started higher risk demolition at PFP. Initial activities will focus on removal of piping from the tunnels below 234-5Z followed by the removal of the remaining portion of the 234-5Z structure which housed the highly contaminated Remote Mechanical A and C lines.

Waste Treatment Plant: Previously, the WTP contractor proposed modifying the Low Activity Waste (LAW) Facility DSA so that it complies with the new safe harbor approach defined in the DOE Standard 1228-2019, *Preparation of Documented Safety Analysis for Hazard Category 3 DOE Nuclear Facilities* instead of DOE Standard 3009-94, *Preparation of Nonreactor Nuclear Facility Documented Safety Analysis* (see 10/25/2019). ORP has communicated that DOE concurs that the proposed change can ensure worker safety while also delivering significant benefits. In their concurrence, DOE noted that the engineered hazard controls will remain physically and functionally intact as they transition from a 10 CFR 830 controlled DSA to a 10 CFR 851 compliant Chemical Safety Management Plan (CSMP). ORP also indicated that a key feature of the transition will be the establishment of an effective management of change process that addresses potential chemical hazards while preserving appropriate ORP control over some CSMP changes. ORP also noted that, in light of the changed approach, it would be appropriate to defer or eliminate some of the planned design and operational improvements (PDOSIs) that were defined as a condition of approval for the original DSA. They directed the contractor to identify the PDOSIs that they intend to defer so that the deferrals can be reviewed and approved by the SBAA. Lastly, ORP indicated that the contractor must clearly describe their rationale for hazard controls that are retained in the DSA versus those to be transitioned to the CSMP.

Hanford Site: DOE published its 2020 Key Performance Goals for the site. The goals focus on Direct-Feed Low Activity Waste, Mission and Site Infrastructure, and Central Plateau/River Corridor cleanup. Activities to achieve these goals include installation of the Tank Side Cesium Removal Pretreatment System, and completion of PFP demolition.

Tank Farms: The Safety Basis Approval Authority (SBAA) approved the annual updates to the Tank Farm, 242-A Evaporator, and 222-S Laboratory Documented Safety Analyses. There were no conditions of approval or directed changes for any of the documents.

Contractor management held an event investigation meeting to determine facts related to a glove bag seam failure that resulted in a small spill of contaminated liquid from the containment. The spill was discovered during routine daily surveys performed around the containment. The discussion focused on the design, manufacture, in-process repair, and certification of glove bags. Workers also noted that visibility was hampered by fogging within the glove bag and the location of supporting equipment made work difficult. These conditions may have contributed to activity that placed stress on the glove bag during their work. Management will use the results of the discussion to inform their approach for future activities that require the use of a glove bag.