

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 25, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: B. Caleca and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending October 25, 2019

DNFSB Staff: Members of the Board's staff held a teleconference with representatives from DOE ORP and the Tank Farm contractor to discuss TSR compliance and reporting.

Waste Treatment Plant: Previously, the WTP contractor proposed modifying the Low Activity Waste (LAW) Facility DSA, which was developed under DOE Standard 3009-94, *Preparation of Nonreactor Nuclear Facility Documented Safety Analysis*, so that it complies instead with the new safe harbor approach defined in DOE Standard 1228-2019, *Preparation of Documented Safety Analysis for Hazard Category 3 DOE Nuclear Facilities* (see 8/16/2019 report). DOE ORP entered into discussion with the contractor regarding the proposal. Based on feedback received from ORP during the discussion, the contractor submitted an alternative approach for the transition. If ORP approves the alternative approach, the contractor will reconfigure the DSA so that chemicals are identified as standard industrial hazards that they will manage under a new Chemical Safety Management Plan (CSMP). Since almost all of the significant hazards identified for the LAW facility are chemical vice radiological, the expectation is that there will be no remaining safety significant structures, systems, or components identified in the LAW DSA. The transition will occur in phases. Under the first phase, the existing TSR chemical controls (except the Waste Acceptance Criteria SAC) will be transferred "as-is" into the CSMP and ORP will retain approval authority for changes to some specific engineered control that are transferred. The first phase is expected to complete before the end of the calendar year. Work related to future phases is still being defined, but will most likely result in modification of the controls that are transitioned to the CSMP in the first phase.

Reduction Oxidation Facility (REDOX): Contractor management held a meeting with personnel assigned to characterization and risk reduction activities at the REDOX facility to discuss the corrective action plan following concerns about spill response in the facility (see 10/4/2019 report). The contractor has requested improved infrastructure to support future activities at the facility, such as additional lighting, climate-controlled spaces for Radiological Control Technicians to perform sample counts, and an easier to navigate step off pad to support increased numbers of workers. Contractor personnel are currently developing a spill response plan specific to the REDOX facility as well as requesting resources to repair the REDOX roof to prevent further water ingress. In addition, contractor personnel are reviewing the current set of approved work packages for the facility to identify areas of improvement, and developing a phased approach to restarting activities as more improvements are made. Management expects lessons learned from REDOX to be incorporated in planning for these future risk reduction activities at other facilities.

Plutonium Finishing Plant: Contractor management held a Hazard Review Board (HRB) to evaluate work instructions that they will use to stabilize oxidizers and other chemicals in four waste drums. The HRB was formally conducted and thorough. The field work supervisor and work crew demonstrated excellent knowledge of the expected hazards and necessary controls.