

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 23, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: B. Caleca and P. Fox, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending August 23, 2019
DNFSB Staff Activity: B. Caleca was off site for training.

Tank Farms: The Tank Farms Operations Contractor implemented the Tank Farms DSA amendment that supports waste retrieval activities in the AX Farm (see 8/9/2019 report). They expect to start retrieving tank AX-102 waste at the end of this month.

242-A Evaporator: ORP notified the Board that there will be a delay in completing two Planned Design/Operational Improvements that were developed to resolve safety concerns associated with the C-A-1 vessel flammable gas control and high-level control systems that the Board communicated to DOE in October of 2016. DOE originally committed to install the improvements before September 30, 2019 but noted in their letter that recent pump and transfer line failures have curtailed evaporator operation and that associated repairs have limited the funding available to support completion of the improvements. ORP now intends to complete the installations before the evaporator is returned to service in 2022. Existing compensatory measures will remain in effect until the improvements are installed.

Waste Treatment Plant (WTP): The ORP Senior Review Board met to evaluate a recently proposed amendment to the Low Activity Waste Facility DSA and TSRs (see 8/2/2019 report). They recommended approval of the amendment and the Safety Basis Approval Authority subsequently approved the changes with no conditions of approval.

Building 324: At the Building 324 mockup facility, a work team demonstrated the remote operations necessary to place the saw that they will use to remove the B hotcell floor to allow retrieval of the contaminated soil from beneath the cell prior to demolition of the facility. The demonstration was observed by the contractor's Hazard Review Board (HRB), who evaluated the work instructions used by the team. The HRB's review was thorough and they identified a number of improvements that will be incorporated into the instructions. Another demonstration will be performed after planners complete their modification of the work instructions.

REDOX Plant: The contractor's HRB met to evaluate a work package that supports size reduction and removal of non-process related items from the facility. The HRB noted that the control set proposed for the work was unwieldy and would be difficult to implement in the field. In particular, a significant number of proposed controls duplicate those already mandated by general and craft hazard analyses. Additionally, radiological controls were not consistently applied as expected within the work instructions. Lastly, work instructions referenced other documents that contain additional controls; the number and complexity of these controls would pose a significant challenge to workers who would be required to implement them. The HRB chairperson reinforced expectations regarding the need for work instructions to contain an implementable control set that effectively control hazards. The HRB did not approve the package and will continue their review at a later date.