

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 21, 2017

TO: S. A. Stokes, Technical Director
FROM: P. Fox and D. Gutowski, Hanford Resident Inspectors
SUBJECT: Hanford Activity Report for the Week Ending April 21, 2017

D. Cleaves was on site to observe Plutonium Reclamation Facility demolition activities.

242-A Evaporator. The contractor provided ORP with additional justification for their position that a readiness assessment is not required prior to the next evaporator campaign (see Activity Report 2/3/2017). They stated that “programmatic work” as defined in readiness requirements was last accomplished when a planned evaporator campaign was suspended in July 2016 rather than the last time the evaporator processed waste in April 2016. ORP is evaluating the response.

Radiochemical Processing Laboratory. A worker’s hand was contaminated during the transfer of a sample vial from a hot cell to a shielded container. The vial, which contained cesium eluent originating from Tank AN-102 supernate, was damaged while placing the lid on the container. The skin contamination apparently occurred when the worker moved the shielded container to a fume hood to reduce the potential for contamination spread. It was discovered when he surveyed out of the area. The hand was successfully decontaminated after multiple attempts using several different techniques. Workers subsequently repackaged the sample vial in a new bag and slip lid container, and returned it to the hot cell. The shielded container remains in a fume hood posted as an HCA. Surveys did not identify any additional contamination.

Tank Farms. The contractor has reported four lockout/tagout (LO/TO) events in the last month. Following an event at the 222-S Laboratory last week, the contractor suspended LO/TO work until after they implemented interim controls using a standing order. ORP sent the contractor a letter expressing concern and noting that the programmatic deficiencies revealed by the LO/TO events and a recent TSR violation (see Activity Report 4/14/2017) call into question the effectiveness of the contractor’s implementation of Integrated Safety Management. ORP directed the contractor to provide their immediate actions to stop and reverse the adverse trend. The contractor’s response states their commitment to disciplined execution of all aspects of their operations and provides immediate actions, as requested.

Last weekend the contractor attempted to transfer supernate from AN-101 to AN-106 to support resumption of C-105 retrieval. A faulty hydraulic indicator prevented the AN-101 pump from starting.

Plutonium Finishing Plant. The Resident Inspectors and headquarters staff observer note that debris loadout and packaging of special handled items lagged demolition this week resulting in accumulation of large debris piles. This is causing congestion in the demolition area, makes contamination control more difficult, and could slow recovery from unexpected contamination spreads. They also note that demolition area contamination levels are rising resulting in a higher probability of contamination spreads outside of the existing radiological control boundaries.

Building 324. RL requested that the contractor resubmit their annual update of the Building 324 Basis for Interim Operations and related documents after addressing RL review comments.