

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 28, 2016

TO: S. A. Stokes, Technical Director
FROM: P. Fox and D. Gutowski Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending April 29, 2016

Tank Farms. AY-102 retrieval operations continue with progress slowing. The contractor is preparing for an outage in which the sluicers will be replaced with extended reach sluicers to reach the remaining solids. Leakage to the annulus and frequency of annulus pumpdowns has been highly variable (see Activity Report 4/21/2016).

The contractor is still evaluating the elevated radiation reading on the CAM paper for the annulus of AY-101 (see Activity Report 4/21/2016). There is no visual indication of a primary tank leak in the area observed. Further actions may include additional annulus rad monitoring and increased frequency of visual monitoring.

The contractor Executive Safety Review Board approved the Cause Analysis Report for the TSR violation related to in-service inspection on safety-significant valves credited for double-valve isolation (see Activity Report 4/1/2016). The identified root cause was that there was no formalized operations procedure to instruct crews on how to perform all the necessary work steps for this preventive maintenance. Four contributing causes were also identified.

Plutonium Finishing Plant. The contractor cut an opening in the 12 inch reinforced concrete wall between rooms 166 and 169 in 234-5Z to allow removal of equipment that would not fit through the existing door. Contractor managers and RL facility reps identified deficiencies in work performance. In particular, the wall between room 169 and the building exterior was damaged but not breached during removal of the wall section and there was a reportable improper application of energy controls. The contractor held a critique. They determined that some steps of the continuous use procedure were performed out of sequence or missed, some hazard controls were improperly implemented, and general performance of the work was disorganized and not always adequately controlled. The problems were exacerbated by late release of the work which could have been avoided by more timely completion of the planning effort. The contractor will determine and implement necessary corrective actions.

The site rep observed workers performing cleanout of Plutonium Reclamation Facility gallery gloveboxes. The work was well controlled and professionally performed.

618-10 Burial Grounds. Last week there was a potential ingestion of dirt by a worker during Vertical Pipe Unit auger repair. The worker was in a contamination area installing a new tooth when the activity dislodged some of the soil remaining on the auger bit after cleaning. Support workers identified that this could be a potential exposure and stopped the activity. Initial surveys and a whole body count showed no evidence of an uptake. Bioassay results are pending.

Waste Treatment Plant. The contractor submitted a revised Criticality Safety Evaluation Engineering study to ORP in support of closing the criticality in vessels technical issue. The new revision is intended to address ORP's review comments from the previous submittal (see Activity Report 12/11/2015).