

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 7, 2016

TO: S. A. Stokes, Technical Director
FROM: P. Fox and D. Gutowski Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending October 7, 2016

Staff member B. Boser, M. Forsbacka, P. Meyer, S. Seprish, and A. Velazquez-Lozada were onsite to review ORP's plans for resolving Waste Treatment Plant Technical Issues.

Plutonium Finishing Plant. The contractor readiness assessment (RA) team issued their final report. Major findings included a determination that the work package for demolition of Plutonium Reclamation Facility (PRF) is not adequate, the project team self-assessment performed in preparation for the RA was not self-critical, there is inadequate focus on procedural compliance, and the project team did not produce an adequate manageable list of open remaining actions prior to demolition.

Contamination was discovered on a worker's modesty clothing after performing work in the PRF. They determined that the contamination most likely occurred when the worker sat on a surface in an HCA without prior survey. The surface had a wet spot caused by leaking condensate from a patch placed where a coupon sample had been obtained on the bottom an E4 ventilation duct. The contamination wicked through the worker's anti-contamination clothing when it became wet. The contractor is taking appropriate actions to prevent recurrence.

The contractor determined that the previously reported PRF CAM alarms (see Activity Report 9/23/2016) were caused by radon. Procedures have been modified to prevent recurrence.

Waste Encapsulation and Storage Facility (WESF). During K3 grouting activities, an individual exiting an RBA discovered contamination on one shoe during an exit survey. During the subsequent response, radiological control personnel discovered another individual with a contaminated shoe as well as spots of contamination up to 400,000 dpm/100cm² beta/gamma outside of the RBA. The source of the contamination was not immediately evident. The most likely source was a grout spill during system disconnect. Contractor management has suspended all WESF grouting activities pending further review.

100K West Basin. The site rep observed contractor activities that supported successful placement of the first sludge retrieval system booster pump into the basin. The work team performed the work professionally and safely.

Waste Treatment Plant. A joint ORP/contractor Commercial Grade Dedication (CGD) Working Group completed their efforts to jointly develop an approach for CGD. The contractor also submitted their revised implementation plan for compliance with nuclear safety contractual requirements to ORP.

222-S Laboratory. The contractor attempted to perform the surveillance of the 219-S vault (see Activity Report 7/15/2016). When the portable ventilation for the vault was activated, a portion of the flexible plastic ductwork collapsed into the ventilation unit. The contractor is evaluating why a hose that was inadequate for the application was installed.