

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 6, 2014

TO: S. A. Stokes, Technical Director
FROM: D. Gutowski and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending June 6, 2014

R. Quirk was off site this week.

618-10/11 Burial Grounds. During routine surveys, workers discovered contaminated plastic debris outside of posted areas of the 618-10 Burial Ground. Follow-up surveys found more debris, which was primarily north and east of the Burial Ground. The contractor suspended Burial Ground operations, is conducting additional contamination surveys, and covered the excavation area that is most likely the source of the debris with soil to minimize any additional contamination spread. The contractor also plans to evaluate improved contamination control methods, housekeeping practices, and survey frequency to prevent recurrence.

The contractor resubmitted a Documented Safety Analysis (DSA) for the 618-11 Burial Ground to RL. Per RL direction, the scope of this DSA is limited to trench remediation and does not include remediation of vertical pipe units or caissons at the Burial Ground.

Waste Treatment Plant. The contractor's senior Safety Design Integration Team (SDIT) met to discuss revisions to the High Level Waste facility's draft Safety Design Strategy (SDS) and supporting SDS implementation documents that address comments from ORP's review team (see Activity Report 5/9/2014). The facility SDIT modified the control strategy for hydrogen in vessels to prefer preventive over mitigative control. Instead of fully defining this hydrogen control strategy in the SDS, they proposed the development of an engineering evaluation that, once completed, will specify the control set. Recently developed draft SDS implementation documents provide significantly more detail regarding how the approved SDS will be used to update the Preliminary Documented Safety Analysis and improve alignment of safety and design.

Tank Farms. The contractor continues operational acceptance testing for the Mobile Arm Retrieval Vacuum System (MARS-V) installed in single-shell tank C-105. One key item that remains to be tested is the new safety instrumented system that monitors flow into the waste accumulator tank to protect the temperature limits on hose in hose transfer lines and isolation valves (see Activity Report 11/15/2013).

Building 324. The contractor performed a functional test of important to safety ventilation interlocks in Building 324. One function of these interlocks is to shutdown supply fans to prevent the building from being pressurized in the event of damage to the exhaust fans. The test required shutting down building ventilation and disabling exhaust and supply fans by removing fan belts. The system has been returned to service following the testing.

Waste Encapsulation and Storage Facility (WESF). RL concurred with the contractor's determination that the WESF stabilization and ventilation upgrade project (see Activity Report 5/23/2014) does not constitute a major modification.