

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 3, 2016

TO: S. A. Stokes, Technical Director
FROM: P. Fox and D. Gutowski Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending March 4, 2016

Staff members B.Caleca, D. Cleaves, and S. Sircar were on site to for a review of seismic risk for the REDOX facility and potential impacts to the 222-S Lab.

Tank Farms. The contractor declared readiness to initiate the supernate transfer from AY-102 to AW-105 with one remaining prestart item. A Joint Test Working Group met to review the results of AY-102 retrieval system testing. The working group determined that all test objectives were met. The site rep noted that the meeting was well executed and that the working group conducted a thorough review of the test results. The test results also uncovered several lessons learned that could be applied to improve future system installations and related testing.

The contractor's Plant Review Committee approved a safety basis amendment creating a new LCO to operate a portable exhauster to support AY-102 retrieval. The existing 702-AZ ventilation system will continue to be the primary control for maintaining flammable gas concentration below 25% of LFL under an existing LCO. The new LCO allows the portable exhauster to provide this safety function for AY-102 when it is operable and operating.

Low Activity Waste Pretreatment System (LAWPS). ORP approved the contractor's request to use ANSI/ISA 84-00.01 in lieu of DOE-STD-1195 for design and construction of LAWPS. The change allows the contractor to apply a graded approach based on frequency and consequences that supports the use of SIL 1 safety instrumented systems (SISs) in some low frequency and consequence cases where DOE-STD-1195 would require SIL 2 SISs.

Site Wide. Three tank farm workers reported odor in their SCBA air. Analysis of the bottles showed organic constituents at or above odor thresholds but below hazardous levels. The tank farms contractor stopped work on use of bottle air aside from minimum compliance work. Since all bottled air is supplied from one source, this led to a site wide stop work on bottled air. The tank farms contractor led a fact finding meeting for this event which was attended by other contractor organizations, including the contractor responsible for filling bottles. The site wide stop work was lifted following visual inspection of the suspect bottles, sampling at the air bottle fill compressor, and communications of the issue and corrective actions to employees.

Sludge Treatment Project (STP). RL's Senior Review Board met to approve Revision (Rev) 2 of the STP PDSA. The revision resolves three conditions of approval identified in the safety evaluation report for Rev 1 of the PDSA (see Activity Reports 2/6/15 and 2/13/2015). The contractor will now integrate the STP PDSA with the K-Basin DSA to support sludge retrieval.

Waste Encapsulation Storage Facility (WESF). The site rep and other members of the staff observed ongoing activities that support eventual grouting of unused WESF hot cells. Work observed included a core drilling mockup and a hazard review board information session. The observed events were effective in accomplishing their intended purpose.