

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 16, 2015

TO: S. A. Stokes, Technical Director
FROM: P. Fox, D. Gutowski and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending January 16, 2015

R. Quirk was offsite providing coverage for activities at Idaho National Laboratory.

Tank Farms. The contractor has issued a stop work on the use of supplied air systems for all tank farm work activities except for the performance of required TSR/Environmental compliance work activities. The stop work was issued when Self Contained Breathing Apparatus (SCBA) regulators failed to shut off when three workers in C farm were doffing their SCBA systems after work in near freezing temperatures. This event occurred after the contractor had put compensatory measures in place for cold weather use of SCBAs (see Activity Report 1/2/2015). ORP has made it clear that this stop work will remain in place until the contractor understands the problem, has identified the relevant causes and the appropriate measures to assure worker safety, and has provided appropriate training for the workforce. ORP has also noted that, over the longer term, the contractor must address apparent problems related to event investigation and notification processes. The strong position established by ORP on this issue is appropriate.

A site representative observed ongoing work to remove a plugged slurry distributor (see Activity Report 1/9/2015) from double-shell tank AN-106. During the evolution, workers discovered that the distributor contained a greater amount of waste than expected. The field work supervisor appropriately stopped the work to obtain an evaluation of the situation. Workers also noted that the shielded enclosure used for interim storage of the slurry distributor will have to be modified because of the unexpected condition.

Waste Treatment Plant (WTP). Contractor management instructed the team developing the Safety Design Strategy (SDS) for the Pretreatment Facility (see Activity Report 1/9/2015) to perform an orderly pause in their work. Management is concerned that SDS development is too far ahead of technical issue resolution. This action is appropriate since data from technical issue resolution is needed to develop a comprehensive SDS. The team is adding documentation and commentary into their current products to support any future resumption of SDS development.

One System. The One System Nuclear Safety Steering Committee continues its efforts to finalize safety analysis methodologies for use by both Tank Farms and WTP contractors (see Activity Report 12/19/2014). The committee voted to approve hydrogen and seismic methodologies. They also approved a guide that defines the level of detail to include in the DSA chapter on Safety Structures, Systems, and Components. The site rep notes that the proposed hydrogen methodology includes a substantial change to the detonation limit versus previous values used by the respective contractors.

Low Activity Waste Pretreatment System (LAWPS). The site representatives met with the recently assigned Engineering, Procurement, and Construction (EPC) Manager for the Tank Farms Contractor (TOC) and the LAWPS Project Manager. The EPC manager discussed plans to implement a suite of processes to support managing major capital projects assigned to the TOC. The processes will be based on those used by the TOC's corporate parent for non-nuclear capital projects, but will be tailored to support their application to nuclear facilities.