

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 7, 2007

**TO:** K. Fortenberry, Technical Director  
**FROM:** R. Quirk and W. Linzau, Hanford Site Representatives  
**SUBJECT:** Activity Report for the Week Ending September 7, 2007

Savannah River Site Rep J. Contardi was on-site this week augmenting site rep coverage.

Project Hanford Management Contract: A Technical Safety Requirements (TSR) violation was declared by the contractor when a facility representative discovered six propane heaters stored adjacent to a TRU drum storage area at the burial grounds in the 200 West Area. The TSR stipulates that containers with more than 32 cumulative gallons of liquefied petroleum gas (LPG) shall not be allowed within 20 feet of outside arrays of stored or staged TRU waste containers. Each of the heaters has a 10-gallon capacity tank and the combined content were determined to be 54.7 gallons. The heaters had been staged for use during night retrieval operation, but were temporarily stored several feet away from a drum storage array. It appears the cause of this violation was a lack of controls for these types of combustible materials once inside the boundary of the burial grounds.

Tank Farms: The contractor concluded they must drain liquids from the dilution hose, the presumed source of the spill from S-102 (see Hanford Activity Report 7/27/07), before placing it in a waste box. The changes to the work package to drain the liquids have delayed the cleanup efforts. The contractor, Office of River Protection, and the Type A Investigation Team are evaluating the level of inspection required to confirm that the hose was the source of the leak.

Plutonium Finishing Plant: The site rep met with PFP management to discuss the preparations for shipping the plutonium to the Savannah River Site. DOE announced its decision to start consolidation this week and shipments can start as soon as 30 days after the announcement. PFP management confirmed they currently do not have any obstacles to overcome before starting.

The project is developing an amendment to the safety basis to permit an alternate storage location of the loaded 9975 containers. It is anticipated that project will generate a backlog of containers waiting to be shipped that will exceed the capacity of the current vault storage.

Range Fire: The site rep met with RL and contractor personnel to discuss follow-up questions on the lessons-learned from the August 16, 2007 range fire. It appears that actions are being taken to strengthen the ability to respond to range fires and to protect facilities but there is no evidence that a formal evaluation of the event was initiated. It doesn't appear that a concise time-line of the event was created which would be part of the evaluation and development of lessons-learned.

Waste Treatment Plant: The site rep met with contractor personnel to discuss the discovery of cracks in the welded joints of the supporting frame for the LAW melter. The melter is supported by a frame that sits on rails used to replace the melter at the end of its life. During fabrication at the subcontractor's shop, cracks appeared in the sections of frame that are made of high-strength steel (A514). The project has decided to re-fabricate the frame using normal-strength steel (A36) and are currently performing the calculations to support this decision.