

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 10, 2007

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJECT: Activity Report for the Week Ending August 10, 2007

Tank Farms: The contractor continues to perform their investigations of the spill at S-102 and has bolstered the team with outside experts to facilitate a more independent assessment (see Hanford Activity Reports 7/27/07 and 8/3/07). Personnel from DOE headquarters will be on-site next week to determine what level of review by DOE is warranted.

A lessons-learned bulletin was distributed to contractor personnel conveying the importance of following all emergency response procedure actions. Actions in the High Radiation Response Procedure specify calling 911, but this action wasn't immediately performed upon indications of high radiation in the S Tank Farms. On the Hanford site, dialing 911 contacts the Hanford Patrol Operations Center. The Office of River Protection, Richland Operations Office (RL), the tank farm contractor, and the contractor responsible for overall site emergency response are determining what changes to the emergency response processes may be necessary as a result of lessons learned from this event.

The site rep accompanied a work team that verified the closure of four valves on the S-102 pump pit box; the valves isolate the dilution line (source of the spill) and sparge line. The operation required the workers to enter the high radiation area (HRA)/high contamination area (HCA)/vapor control zone (VCZ) and required a significant numbers of support personnel for this relatively simple task. The site rep noted that the contractor installed support equipment to facilitate exits from the HRA/HCA/VCZ. Training of the large number of workers that will be involved in the recovery actions may be required so that they can become proficient in the exit process.

The contractor continues preparations to clean up the spill area. A mock-up of the area is being constructed in S-Tank Farms to practice the plan for removing the contaminated hose. The hose will be sleeved in plastic and placed in a lined box. The plans to conduct a detailed examination of the hose to determine the exact failure mechanism are still being formulated. A tent will be used to minimize the spread of contamination caused by precipitation and wind during the clean-up activities.

Solid Waste Operations Complex (SWOC): The contractor completed a gap analysis between the SWOC Master Documented Safety Analysis (MDSA) and the new standard for transuranic waste facilities DSAs (DOE-STD-5506). The analysis revealed that some of the changes required to achieve compliance have a significant estimated cost. An example of the gaps is that the standard gives a minimum set of accident events that shall be addressed in the DSA, but the Solid Waste MDSA does not currently have the complete minimum set.

DOE Management: Mike Weis is the new Manager of Pacific Northwest Site Office. Doug Shoop was named as the acting RL Deputy Manager.