

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 1, 2005

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** J. S. Contardi/M.T. Sautman, SRS Site Representatives  
**SUBJECT:** SRS Report for Week Ending July 1, 2005

**Neptunium Processing:** HB-Line has processed nearly 54 percent of the expected 250 kg of neptunium. Thus far, approximately 20 shipping packages have been filled. As a result of material accountability issues, the contractor recently measured the moisture content of the oxide from existing samples. Several of the samples indicated greater moisture content than expected. High moisture content could result in increased pressure within the neptunium package configuration during long term storage. The contractor is currently evaluating a path forward. If the issue is not resolved by early August, some shipping packages may have to be recertified in order to meet the 9975 Safety Analysis Report for Packaging.

**2-H Evaporator:** During a recent 2-H Evaporator outage, mechanical cleaning was utilized for cleaning the evaporator pot lift line and gravity drain line. The contractor used a high pressure water lance to break up scale and improve flow rates. Following successful post-maintenance testing, site personnel returned the evaporator to service on 6/20/05. Approximately 30 minutes after resuming operations, flow rates through the separator pot decreased significantly. Video surveillance within the separator pot revealed significant accumulation of solid material believed to be dislodged scale deposits. The contractor will attempt to clean the pot and associated transfer lines using the water lance. If successful the evaporator could be operational as early as next week. A chemical cleaning of the evaporator system is planned for the fall outage.

**Glass Waste Storage Building #2:** This week the Site Reps walked down Glass Waste Storage Building #2 (GWSB #2). Construction began in early 2004 and should be completed ahead of schedule in late 2005. GWSB #2 will add approximately 2340 spaces for Defense Waste Processing Facility canisters. Based on expected DWPF processing rates, GWSB #2 will provide enough canister storage locations until late 2016.

**Emergency Response:** The Site Rep met with the Fire Department (FD) Chief and managers of the emergency response and radiological control organizations to discuss the roles and responsibilities of the FD and radiation control personnel (see last 2 reports). Previous responses to the Site Rep from the FD Training Chief on this topic were not fully consistent with the site's policy. The Site Rep was also concerned about FD anecdotes that the emergency response at certain facilities was inconsistent with the site policy, but a follow-up review by the site radiation control manager could not confirm this. The FD plans to provide their crews training next month on radiological survey instruments to reinforce the proper use of them. The Site Rep also observed a more challenging (and less simulated) emergency drill at the Solid Waste Management Facility. Although there was visible smoke (from a smoke bomb), nearby workers digging a slit trench continued to work for several minutes after the FD arrived, a Site Area Emergency had been declared, and shelter in place direction was announced. Numerous poor radiological practices could have resulted in extensive cross-contamination of personnel, equipment, and the decontamination area itself. Controllers noted several problems with the FD's response.