

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 23, 2006

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** J. S. Contardi/M.T. Sautman, SRS Site Representatives  
**SUBJECT:** SRS Report for Week Ending June 23, 2006

**DNFSB Activity:** Site personnel briefed the Board members and the Technical Director on high-level waste management, nuclear material stabilization and storage, and site-wide safety issues. In addition, Board member J. Bader walked down the Saltstone Production Facility (SPF) and had additional high-level waste management discussions with site personnel.

**Plutonium Operations:** The Site Rep observed plutonium alloy can cutting operations in the F-Area Material Storage facility (FAMS). The process is used to open 3013 containers so that the bagless transfer cans can be repackaged into separate shipping packages for future processing in HB-Line. In general, the operators demonstrated adequate procedure compliance and radiological practices. However, the failure of an ill operator to properly communicate his condition resulted in an inadequate response while exiting the contamination area.

**Design Features:** The Site Rep questioned the designation of a headspace gas analysis cabinet as an "initial condition" rather than a design feature in the draft Consolidated Hazards Analysis (CHA) for Handling Potentially Flammable Drums at the Solid Waste Management Facility. The contractor believes the cabinet's robust construction will direct any blast effects away from the control room operator and nearby workers should a deflagration occur in the unit. Similarly, the contractor considers a deflagration to be incredible in the draft CHA for the Repackaging of Waste Stored in Large Steel Boxes for H-Canyon due to venting. However, the Site Rep questioned whether this scenario could really be considered incredible in an unmitigated analysis when the CHA does not designate the filter vent as a design feature, did not credit the verification of the venting by H-Canyon personnel, and solely relied on another facility to ensure this key feature was present and functioning.

**FAMS Facility Decommissioning:** The Department of Energy (DOE) met with the Environmental Protection Agency and State regulators to discuss the decommissioning end state for FAMS. The site contractor recently completed an evaluation of various end-states, which concluded that in-situ disposal is the preferred alternative. This option would not remove the legacy contamination but instead stabilize the existing material in place by filling the structure and various components with grout. The evaluation will be used to support a final decision which will be delineated in a critical decision-1 package for the decommissioning of the facility.

**Tank 48:** The Independent Technical Review team provided a preview of their findings to date. While they agree that steam reforming and wet-air oxidation are the two most promising treatment technologies, they believe there is severe schedule risk of missing the desired date for returning tank 48 to service unless processing and heel disposition are decoupled (possibly by concentrating the waste and using a separate feed tank). Because the amount of carbon in tank 48 is much greater than can be handled at the Defense Waste Processing Facility, the ITR highlighted the need for the process to go beyond organic destruction, but to also separate the carbon from the cesium.