

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 4, 2012

**MEMORANDUM FOR:** T. J. Dwyer, Technical Director  
**FROM:** B.P. Broderick and R.T. Davis  
**SUBJECT:** Los Alamos Report for Week Ending May 4, 2012

**Plutonium Facility:** Plutonium Facility management has submitted for site office review and approval a temporary safety basis modification that would allow three types of containers to be credited with damage ratios of less than one. The temporary safety basis modification package requests that the functional classification of Hagan, SAVY-4000, and 3013 containers be upgraded from their current designation of safety significant to safety class and that damage ratios of 5%, 1%, and 0%, respectively, be credited for these containers based on the results of thermal and mechanical insult testing. Upgrading these container types to safety class with damage ratios much less than one will allow facility personnel to address the recent discovery of 17 containers stored in the vault that exceed the TSR-level individual container material-at-risk limit. Many of these 17 items are already stored in Hagan, SAVY-4000 or 3013 containers, and all but one of the remaining items (a 55-gallon drum) can be overpacked into one of these containers to restore compliance with the TSR limit. LANL personnel intend to capture these three container types as safety class in the 2012 DSA Annual Update and retire the temporary safety basis modification.

**Weapons Engineering Tritium Facility (WETF):** As discussed last week, LANL is overpacking four Standard Tub containers into Flanged Tritium Waste Containers (FTWCs) for disposal at Area G. Although all containers have now been overpacked, only one of three FTWCs has passed the required leak test. Based on discussions with the vendor, WETF personnel have increased the torque used on the container and will re-perform the leak check on one of the remaining FTWCs early next week.

This week, WETF management declared a Technical Safety Requirement (TSR) violation based on the failure to appropriately perform a TSR surveillance for the battery associated with the safety significant Halon fire suppression system. Based on questions from an NNSA facility representative, WETF personnel concluded that the recently completed surveillance for the battery discharge test was not performed consistent with the description of the surveillance in the bases section of the TSR. In February, WETF completed implementation of a safety basis update that included changes to the TSR bases for this surveillance. The revision includes requirements for a 24 hour discharge period followed by a five minute full fire alarm load test. Previously (and during the most recent surveillance), facility personnel performed the battery discharge test using an accelerated discharge device consistent with a site-wide preventive maintenance procedure. WETF is revising the surveillance procedure to be consistent with the TSR description and developing corrective actions for this issue.

**Safety Basis:** During last year's Las Conchas fire, aircraft were used as part of the overall wildland firefighting and containment effort. This week, LANL management responded to an NNSA site office request by submitting an evaluation of aircraft crash probabilities for firefighting aircraft. Laboratory analysts concluded that crash probabilities did not exceed  $10^{-7}$  per fight directly over a nuclear facility and therefore no additional controls are necessary to protect LANL nuclear facilities from firefighting aircraft crashes.