

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 8, 2013

**MEMORANDUM FOR:** S. A. Stokes, Acting Technical Director  
**FROM:** R.T. Davis and R.K. Verhaagen  
**SUBJECT:** Los Alamos Report for Week Ending February 8, 2013

**Plutonium Facility – Criticality Safety:** This week, Plutonium Facility management declared a Potential Inadequacy of the Safety Analysis (PISA) based on failure to capture criticality safety controls associated with facility transfer carts in the safety basis. LANL had previously declared a criticality safety infraction when containers that were too small to be restrained by an interference plate were identified on these carts, which defeated the control in the criticality safety limit approval (see 1/18/13 weekly). During investigation of the infraction, LANL noted that the criticality safety documents specified the transfer cart controls for inclusion in the safety basis consistent with requirements in DOE-STD-3007 and site procedures; however, no action had been taken to capture these controls in the safety basis. Facility management declared a PISA on Tuesday and terminated normal operations in the facility to remove criticality safety postings and segregate these carts. Following these actions, the Plutonium Facility was returned to normal operations; however, lack of these carts significantly impacts the ability to move nuclear material in the facility. LANL is pursuing safety basis changes to appropriately capture the criticality safety controls and return the carts to service.

**Weapons Engineering Tritium Facility (WETF) – Work Planning:** During the closeout review of a work package, a work planner identified that an independent verification of a lockout/tagout had not been performed as required. The facility operations director convened a critique that identified work planning improvements for independent verification were necessary to remove ambiguity and to ensure the appropriate checks were completed. These improvements included requiring all lockout/tagouts at WETF to have an independent verification, and that all required independent verifications be procedural steps in the integrated work document vice relying on the lockout/tagout attachment to direct this action.

**Area G – Permacon Box Repackaging:** A contractor readiness assessment of Permacon box repackaging line operations in Dome 231 of Area G was completed this week. The assessment was performed to ensure readiness for Hazard Category 3 (HC-3) operations in this facility. The assessment team concluded that the facility demonstrated adequate readiness for operations, and that following closure of the one pre-start finding HC-3 box repackaging operations could be performed safely and compliantly.

**Area G – Safety Basis:** LANL requested a temporary safety basis modification this week to allow disposition of three sealed tanks in the Sort, Segregate and Size-Reduction areas at Area G. The current Area G safety basis does not allow opening of sealed containers due to the potential for the presence of hydrogen. The temporary safety basis change proposes using the following Specific Administrative Controls consistent with the controls used at the WCRR Repackaging Facility: 1) use of non-sparking tools to loosen the lid/flange bolts sequentially; 2) stopping all spark-generating operations while the tank opening is elevated above the horizontal plane – spark generating activities shall not resume until hydrogen levels at the tank opening are measured and demonstrated to be less than 4%; and 3) workers and tanks must be grounded. The LANL request notes that additional sealed containers are expected to be identified that require remediation and notes that a formal change to the safety basis will be requested in the next 60 days.