

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 31, 2013

**MEMORANDUM FOR:** S.A. Stokes, Acting Technical Director  
**FROM:** R.T. Davis and R.K. Verhaagen  
**SUBJECT:** Los Alamos Report for Week Ending May 31, 2013

**Plutonium Facility – Criticality Safety:** Operations remain paused in the room where the Board’s staff identified a criticality infraction during their recent on-site criticality safety review (see 5/24/13 weekly). Operators, engineers, criticality safety and facility operations personnel are walking down each operation within this room to ensure that the criticality safety controls are clearly understood and adequately captured in procedures and postings. Additionally, the walkdowns are being used to verify that procedures can be followed as written and reflect the work as it is actually performed.

**Radiological Laboratory, Utility, and Office Building (RLUOB):** This week, LANL completed their Management Self Assessment (MSA) to commence radiological operations with less than Hazard Category 3 nuclear materials at RLUOB. The team identified 6 pre-start findings and 4 post-start findings during the review; however, the manageable list of open issues at the start of the MSA included a number of items that the team considered pre-start findings. The MSA team recommended that radiological operations be authorized following closure of all pre-start findings.

During RLUOB construction, a limited number of laboratory rooms included installation of analytical chemistry equipment. The other laboratory rooms have support services (e.g. electrical, water, air) stubbed off and the rooms are empty. As part of the overall plutonium strategy to support analytical chemistry requirements and closure of CMR in 2019, LANL plans to install additional capability in the vacant laboratory rooms and increase the material limit to 38 grams Pu-239 equivalent consistent with the NNSA supplemental guidance on DOE Standard 1027.

**Area G – Safety Basis:** The field office provided comments from their review of LANL’s revised submission of the Area G Basis for Interim Operations (BIO) and Technical Safety Requirements (TSR). The field office directed LANL to incorporate resolution of these comments within 30 days to support implementation of the BIO and TSRs by September 2013.

**Lightning Protection Systems:** The field office conducted an assessment of LANL’s Lightning Protection System Program from November 2012 to January 2013. The assessment identified eleven findings, two observations, and one noteworthy practice. The assessment team noted that it was particularly concerned with the lack of rigor placed on maintenance of lightning protection systems and noted instances of system deficiencies that have been identified but not corrected for several years.

**Area G – Dome 375 Box Repackaging Line:** This week, the field office issued its implementation plan for the Federal Readiness Assessment (FAR) of Hazard Category 2 Sort, Segregate, Size Reduction and Repackaging Operations at Area G Dome 375 (see 4/5/13 weekly). The FRA is currently scheduled to commence on July 8, 2013.

**Safety Basis:** In January, LANL provided the field office with a safety basis improvement plan to address issues in staffing, training, and qualification and to improve the overall quality and timeliness of safety basis submittals. The field office provided comments on the scope and details of the plan and requested resubmittal of this document in December 2013. Although improvements have occurred in some areas, LANL continues to struggle with the quality of safety basis documents (see 5/3/13 weekly).