

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 11, 2008

**MEMORANDUM FOR:** T. Dwyer, Technical Director  
**FROM:** B. Broderick and R.T. Davis  
**SUBJECT:** Los Alamos Report for Week Ending July 11, 2008

Bamdad and Kimball were onsite this week attending a workshop on safety-class controls for the Chemistry and Metallurgy Research Building Replacement. Laake, Martin and Von Holle were also onsite to discuss LANL activities related to unresolved electrostatic discharge issues at Pantex.

**Chemistry and Metallurgy Research Building Replacement (CMRR):** This week, the Integrated Safety Committee held a workshop to discuss the preliminary safety basis accident scenarios and selection of safety-class controls. For the facility fire scenarios, the preliminary safety-class controls include fire barriers, fire suppression and aspects of the material container. The facility structure is also credited as safety-class for several accident scenarios including seismic events. The facility active ventilation system is identified as safety-significant (performance category-3) and will provide additional mitigation for most of the postulated accident scenarios. The CMRR project team plans to submit an updated Preliminary Documented Safety Analysis to the site office in November.

**Plutonium Facility:** As noted on June 6<sup>th</sup>, the NNSA Readiness Assessment (RA) team did not recommend approval to startup interim radiography operations (IRO). Upon reviewing the RA team final report, the site office provided recommendations to the authorization authority (NA-10), including: LANL will perform an independent review of IRO design changes (focused on extent-of-condition for engineering issues); and LANL will demonstrate the IRO procedure to an experienced NNSA team. Upon successful completion, the site office will recommend startup to NA-10.

**Transuranic Waste Operations:** LANL has formally responded to NNSA's disapproval of the Area G safety basis. The LANL response does not challenge the disapproval, but does highlight areas of technical disagreement that need to be addressed prior to re-submittal. One significant area of disagreement is whether the control selection strategy and control definitions comply with relevant directives, such as DOE-STD-3009 and DOE-STD-5506. LANL also expressed confusion over NNSA issues related to controls for remote drum venting operations since proposed controls are nearly identical to recently approved controls that serve as the basis for the ongoing startup activities discussed below. To promote better communication on these types of issues during future safety basis development cycles, LANL proposes establishing "phase-gate" meetings with NNSA at strategic intervals during the preparation of all future safety bases (site rep weekly 6/27/08).

In June, LANL management decided to re-perform the laboratory RA for remote drum venting operations at Area G based on lessons learned from the IRO startup and concerns about the adequacy of the review. Last week, the subsequent laboratory RA team concluded their review. The team identified several pre-start and post-start findings but concluded that the remote drum venting operations could be safely performed following causal analysis and closure of pre-start findings. Notably, the team identified a post-start finding that the Integrated Safety Management System did not appear effective based on a number of issues identified during the review.

**Readiness:** In response to issues related to the IRO and remote drum venting readiness activities, the site office formally directed LANL to report on the adequacy of staffing for readiness preparation and review functions, as well as, lessons learned and corrective actions stemming from these activities.