

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 6, 2008

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** B. Broderick and R.T. Davis  
**SUBJECT:** Los Alamos Report for Week Ending June 6, 2008

**Worker Safety:** Recently, personnel have sustained a series of hand and finger injuries while performing work in nuclear and radiological facilities. In one case, a KSL worker severed the tip of his finger while performing circuit breaker maintenance at the Sigma complex (TA-3-66). In two other cases, one at the WCRR repackaging facility and the other at a TA-48 radiochemistry laboratory (RC-1), hand wounds were sustained inside radiological areas. While subsequent wound counts were negative, these near-miss events had the potential to cause radiological uptakes and share some similarities to the January 2007 contaminated puncture wounds sustained at TA-55 and CMR.

**Contractor Assurance:** Preliminary activities supporting an institutional review of integrated work, safety, and security management systems began this week. Part of the scope of this review will be to evaluate the first line manager program that was established as a corrective action from the Type B-like investigation of the 2007 contaminated puncture wound events mentioned above.

The contaminated puncture wound accident investigation produced a judgment of need to provide supervision that exerts positive control and surveillance over all workers, work activities, and work space. First line manager (FLM) positions were created to satisfy this judgment of need. Although each laboratory directorate established FLMs, actual implementation of this program diverged sharply across the site in terms of the rigor of the selection and vetting process, training and indoctrination received by FLMs, and ultimate FLM span of control. Given the drastic differences in FLM implementation, insights into the effectiveness of first line supervision at all nuclear and radiological facilities appear particularly relevant and timely in light of recent operational and potential precursor events, including the worker injuries described above (site rep weeklies 1/11/08, 9/7/07, and 1/19/07).

**Plutonium Facility:** This week, the NNSA Readiness Assessment (RA) team provided an outbrief to site office and lab management on their review of the interim radiography project at TA-55. The RA team did not recommend that the authorization authority (NA-10) approve startup of this activity based on the number of findings (18 pre-start and 22 post-start findings were presented at the outbrief), questions about the adequacy of the preceding laboratory RA, and the potential for additional issues to be identified. The site office plans to review the final report and provide a recommendation to NA-10 on how to proceed (site rep weeklies 6/6/08, 6/15/07, and 3/23/07).

**Federal Oversight:** The NNSA site office updated its Facility Representative (FR) staffing plan. The new plan does not change the overall FR staffing requirement of 14, but does adjust individual facility allocations and identifies the need to provide a level of FR coverage for a number of radiological and high hazard facilities that did not previously have the benefit of a dedicated NNSA field presence. Additional facilities receiving FR coverage under the updated plan include the DARHT hydrodynamic test facility, the LANSCE accelerator facility, TA-48 radiochemistry facilities, the Sigma Complex, the Beryllium Technology Facility, the High Magnetic Field Laboratory, and the Health Research Laboratory. The updated plan also provides more focused FR coverage for the Chemistry and Metallurgy Research Building and the Weapons Engineering Tritium Facility.