

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 29, 2008

MEMORANDUM FOR: T. J. Dwyer, Technical Director
FROM: B. Broderick and R.T. Davis
SUBJECT: Los Alamos Report for Week Ending August 29, 2008

Contaminated Puncture Wound: The laboratory accident investigation continued this week, with the team focused on personnel and management interviews and timeline development. In addition to the on-going investigation, a number of other efforts to evaluate glovebox safety and glovebox glove integrity are progressing. These include the LANL effectiveness evaluation for corrective actions associated with the January 2007 puncture wounds; an evaluation of glovebox glove breaches at the Plutonium Facility; and an assessment of Glovebox Glove Integrity Program implementation. These parallel efforts are being performed under the auspices of several different laboratory organizations, but appear to be analyzing different facets of the same problem. As such, upon completion of these activities, there may be value in having a single entity collect and review the results, consolidate identified issues, and coordinate an integrated response (site rep weeklies 8/22/08, 8/15/08, 7/18/08).

Chemistry and Metallurgy Research Building (CMR): This week, LANL submitted a revised program execution plan (PEP) to support operations in CMR beyond 2010. The revised PEP incorporates decisions and actions stemming from the May integrated nuclear planning workshop devoted to CMR. The programmatic baseline has been revised and de-scoped to reflect only Confinement Vessel Disposition Project work in Wing 9 through 2013 and analytical chemistry and material characterization work continuing in Wings 5 and 7 until the CMR Replacement facility is operational. Relatively few changes were made to the list of priority safety system upgrades, however, deferred breaker maintenance and enhancements related to the fire alarm and fire suppression systems have been added. The revised PEP also explicitly identifies risk mitigation through relocation of non-essential personnel to more robust facilities (site rep weekly 5/23/08).

NNSA Headquarters (NA-10) recently issued a letter directing the site office to prepare an exit plan, due in mid-December, to transition activities out of CMR 'as soon as practicable.' It is not yet clear the extent to which this direction will alter the baseline path forward codified in the revised PEP.

Transuranic Waste Operations: On Wednesday, the site office authorized startup of remote drum venting operations at Area G. The authorization memo requires LANL to demonstrate operational maturity by venting five low-activity drums without needing process or procedural changes prior to addressing any of the 11 high-activity drums that require venting to complete the current campaign.

Plutonium Facility: Interim Radiography Operations (IRO) were also authorized to begin this week. The IRO capability eliminates hazards associated with shipping pits round-trip to LLNL for high-energy radiography and significantly improves the efficiency of LANL pit manufacturing.

Readiness: Startup authorization for the new capabilities discussed above is positive in that both help to reduce or eliminate hazards. However, the NNSA site office perceives that LANL prematurely declared implementation in both cases, based on readiness assessment findings that some procedures could not be performed as written and some controls were not fully implemented. The site office has set an expectation for LANL to systematically review these experiences, identify lessons learned, and track corrective actions to closure. LANL has identified and begun executing steps to prevent recurrence (site rep weeklies 8/15/08, 8/8/08, 8/1/08, 7/11/08, 6/13/08, 6/6/08).