

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 17, 2004

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: T. D. Burns Jr. and C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending December 17, 2004

Resumption Status: About a quarter of LANL moderate and higher risk activity groups have not yet been approved to resume, including waste operations and site support contractor (KSL) activities. Many remaining activities have been deemed essential and have continued in parallel with resumption reviews. The formal process has been that line management proposes activities as essential after Resumption Review Board (RRB) concurrence. Also, when resumption reviews identify an applicable pre-start finding, essential activities have stopped until adequate compensatory measures are in place.

Based on recent events, formal control of the resumption process and of essential activities is eroding – a trend that needs to be reversed. Formal closure of RRB traveler actions would be beneficial. A systematic review of the many corrective action plans now being pursued for consistency, completeness, and effectiveness would also be worthwhile (site rep weekly 11/19/04). Unless such a review is done and acted upon, LANL may return to conditions existing at the time of the stand-down.

Radioactive Liquid Waste Treatment Facility (RLWTF): The Plutonium Facility (TA-55) is nearly waste-logged, which has mission and safety implications. The LANL Director and the NNSA Site Office Manager have approved the TA-50 RLWTF receiving and processing TA-55 transuranic liquid waste next week, as an essential one-time-only activity. This has safety implications for RLWTF (site rep weekly 10/29/04). TA-50 plans to mitigate risks by keeping the liquid level in the waste receipt tank below the known leak site and by-passing a corroding clarifier tank. While this may be acceptable, the RRB has not formally reviewed and concurred in this activity as essential, nor has the NNSA Site Office extended previous authorization basis approval to use the leaking waste receipt tank.

Site Support Contractor (KSL): LANL and KSL have aggressively inserted management into the KSL integrated work control process as a compensatory measure for an approved but failed compensatory measure involving checklists and training. LANL resumption reviews have found the checklists and training are ineffective - conditions that elsewhere led to suspension of activities deemed essential. The aggressive management steps appear to be the actions that should have been taken in the first place. These steps have not been formally reviewed and concurred in by the RRB as the compensatory measure. Furthermore, the failed compensatory measure is representative of the corrective actions being pursued by other LANL organizations (e.g., checklists or procedure changes that may not really address the issue). The effectiveness of such corrective actions is suspect.

Critical Experiments Facility (TA-18): TA-18 operations are suspended until LANL proposes and NNSA approves a credible, integrated, and resource-loaded plan for FY-05 activities. LANL intends to propose and have the plan in place by January 15th. Meanwhile, NNSA is requiring that the Site Office Assistant Manager for Operations concur in the plan-of-the-day and in the work release of all higher risk activities and all moderate risk activities involving nuclear material, except for emergency actions. NNSA intends to release only those activities required to ensure safety and security.

Chemistry and Metallurgy Research Building (CMR): On Wednesday, Wing 5 evacuated and LANL Hazmat team responded after potentially shock-sensitive dried perchlorates were found on a bottle in a storage cabinet. The NNSA facility rep and CMR raised concerns about the first response plan. After more information became available, Hazmat entered and successfully removed the hazard.