

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 19, 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 November 19, 2004

Andrews, Jordan, and White were here this week reviewing LANL resumption status.

Resumption Status: The LANL Director has approved resuming 67 % of the moderate and higher risk activity groups (i.e., 21 of 24 moderate risk; 8 of 19 higher risk; 29 of 43 total). Overall, the reviews have been rigorous, and the startups are proceeding deliberately. The resumption effort has improved LANL's management self-assessment (MSA) capability, but further improvement is still warranted and is receiving attention. Systematic analysis of review findings and development of corrective action plans are both about half-done. More emphasis on standardized resolution of local issues would be beneficial (i.e., take the best ideas from around the lab to develop common solutions). Where they fit, institutional issues are being captured in the Operational Efficiency Project; however, that project does not include nuclear material management (i.e., Recommendations 94-1/00-1), lab-wide corrective actions from the TA-55 Pu-238 uptake event (8/03), or lab-wide fire protection improvements. These other areas also warrant priority. Status of some nuclear operations follows:

Radiography Operations (TA-8-23): The LANL Director approved a limited resumption this week. Operations with explosives and tritium are prohibited until a lab readiness assessment confirms lightning protection and related issues are corrected. Operations involving greater than 40 g Pu equivalent are prohibited until safety basis deficiencies are addressed.

Critical Experiments Facility (TA-18): This week, TA-18 received "essential-activity" approval to begin packaging security category I/II material for shipment to Nevada Test Site and to TA-55. TA-18 has developed a plan to address the issues reported last week. While the plan appears promising, it would be prudent if performance metrics were established and if more progress were made before certain operations resumed, including critical experiments. NNSA and LANL are on this course.

Solid Waste Operations: The lab readiness review (LRR) team has completed field work and their report is imminent. Non-intrusive characterization activities to support the Quick-to-WIPP program should start in mid-December. The TRUPACT loading facility (TA-54 RANT) has seismic issues involving the roof-to-wall connections that need to be reconciled prior to resumption.

Plutonium Operations: TA-55 and CMR have approval to resume, including Pu-238 operations. They will complete material inventory next week. As a result of clean-out operations, TRU caustic solution storage is nearly full (~95 %), increasing pressure to discharge to TA-50 (RLWTF).

Liquid Waste Operations: After 14 months, RLWTF has received approval to procure but not yet install a replacement for the leaking caustic waste receipt tank. The delay is largely due to confusion on what constitutes a major modification requiring a preliminary documented safety analysis (PDSA). Because of material condition, RLWTF capability to receive and treat TRU waste is questionable.

Tritium Operations: WETF has resumed operations. TSFF will propose de-inventory as an essential activity, which could positively accelerate its re-categorization as a radiological facility.

Other Operations: LANSCE is proceeding toward deliberate resumption of Lujan Center operations. Activities involving the site support contractor (KSL) and on-site transportation are still under review.