

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 24, 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 September 24, 2004

Nichols was here this week supplementing site rep coverage of LANL resumption activities.

Resumption Status: Next week, LANL may start 3 or 4 of the 9 lab readiness reviews (LRRs) anticipated for nuclear facilities. The Resumption Review Board (RRB) has approved starting the Weapons Engineering Tritium Facility LRR and is reviewing the 3 management self-assessment reports for the CMR Building and the Plutonium Facility, including Pu-238 operations. LANL also revised its resumption plan this week. The changes include simplifying the classification-of-findings criteria. A condition of imminent danger, a violation of requirement indicating unknown or unanalyzed risk, or a newly discovered issue that would have stopped work before the stand-down are considered as potential pre-start findings. Such findings are required to have compensatory measures in place, and these are required to be verified by senior management before acceptance by the RRB.

Integrated Safety Management (ISM): LANL has issued an updated integrated work management process and plans to implement it by June 2005. Activities with new, deficient, or missing work control documents are expected to implement it by end of November. This action is responsive to the Board's letter of 9/13/04, which suggested LANL fully and aggressively pursue an improved process in parallel with resumption. Some changes in the process include increased emphasis on worker involvement and management accountability, particularly at the group level; a simplified, site-wide grading logic similar to that used for the resumption process; a job hazard analysis tool/database; clear subject matter expert involvement; and required training. As part of the resumption review process, NNSA has also informally observed that LANL facilities with some maturity in formality of operations have tended to demonstrate effective integrated work management. This week, LANL issued a Conduct of Operations Manual and institutional requirements long in development. LANL has committed to have demonstrable compliance with the applicable DOE order by September 2005.

Authorization Basis (AB): LANL has reported certification issues with sealed sources in two radiological facilities and has placed the sources in robust safes as a compensatory measure. LANL raised the issues after NNSA inquiries into the certification at another facility, including questions on source size, age, and compliance with current requirements (ANSI N43.6-1997). In April 2000, NNSA and LANL credited sealed-source certification and down-rated these facilities to radiological status. Considering the inventory without a certification exemption, these facilities appear equivalent to nuclear facilities (e.g., Hazard Category 2 or 3), and valid certification would appear equivalent to a safety-class or safety-significant requirement. Overall, NNSA and LANL may be well-served to periodically reevaluate the surveillances performed and the bases for acceptance of LANL radiological facilities.

Unreviewed Safety Questions (USQ): NNSA and LANL have identified issues with the LANL USQ process (site rep weekly 8/20/04). The DOE performance assurance office (DOE-OA) has also asserted that the applicable DOE guide is not compliant with the Nuclear Safety Rule (10 CFR 830) and consequently the LANL USQ process is not consistent with the Rule. LANL is revising its USQ process to address these issues. This is being done expeditiously to support the resumption process.

Tritium Facilities: As part of resumption reviews, LANL has identified AB compliance issues in TA-21 (TSFF). LANL intends to reduce TSFF's inventory and propose downgrading it to radiological status. TSFF will likely continue neutron tube target loading until after WETF starts up those operations.