

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 13, 2006

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director

FROM: C. H. Keilers, Jr.

SUBJECT: Los Alamos Report for Week Ending January 13, 2006

Jordan was on site this week augmenting site rep coverage.

Plutonium Facility (TA-55): Thursday evening (1/12), LANL placed TA-55 in standby (Mode 2) and established a 2 hour roving fire watch due to suspected failure of a 17-year-old fire alarm system component that is no longer made. Last year, NNSA designated this system as safety-significant as one of the compensatory measures for the confinement strategy issue. LANL plans to eventually replace the system as part of the TA-55 reinvestment project. On Friday (1/13), NNSA approved LANL's proposed path-forward, which involves modifying the system and testing at least one alarm device in each of the roughly 200 zones before removing the fire watch and returning to operations.

In addition to the above, LANL continues its deliberate investigation and recovery planning for the vault contamination of Dec 19th followup on suspect packaging has led to checking containers in CMR and TA-35(TA-55). LANL also appears on schedule to submit by Jan 31st its refined analysis of the passive confinement strategy (site rep weeklies 9/16/05, 9/23/05).

DOE Independent Oversight: The DOE Office of Independent Oversight (DOE-SP-40, formerly DOE-OA) has issued their final reports on their October assessment of LANL and the NNSA site office (LASO); previous summaries apply (site rep weeklies 10/21/05, 12/9/05, 12/30/05). The final report on LANL emphasizes needs for: • clarifying the direction, expectations, and accountability for implementing the integrated work management (IWM) initiative; • establishing a systematic approach to address longstanding issues on the TA-55 safety basis and vital safety systems; enhancing and effectively implementing the lab's corrective action management process. The next steps are for NNSA to forward the report to LANL and for LANL to prepare a corrective action plan.

Criticality Safety: The site rep understands that a LANL plan to respond to last month's NNSA criticality safety assessment report is imminent (site rep weekly 12/16/05). The NNSA team recommended that LANL within 3 month review all ongoing fissile material operations and provide a formal basis for continuing these operations, with emphasis on ensuring that an explicit criticality safety analysis exists for each, that the controls developed are implemented in postings and procedures, and that appropriate configuration management is in place for all explicit and assumed engineered controls. Due to the extensive number of such operations (~700 in TA-55 alone), LANL plans to focus efforts before March 8th on reviewing documentation with assistance from outside experts and on correcting identified deficiencies; on-the-floor reviews would follow. While concerned about the completeness of this effort, NNSA has indicated that this is an acceptable path-forward.

Critical Experiments Facility (TA-18): The site rep understands that the effort to resume SHEBA operation remains under-funded and has decreasing priority; the probability of success appears very low based on the low priority and the similar but unsuccessful attempts last year to restart Planet and Comet. Furthermore, there are informal reports that the Nevada Test Site Device Assembly Facility (DAF) is under-funded for FY-06 and may be placed in warm-standby in March; if this does occur, it will likely impact transferring remaining TA-18 material, now at TA-55, to DAF and timely starting up operations in DAF that would support the national criticality safety research and training program.