

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 15, 2005

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: T. D. Burns Jr. and C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending April 15, 2005

Waste Operations: This week, LANL made its first transuranic waste shipment to WIPP since October 2003; it consisted of 19 Quick-to-WIPP drums. Near-term, it appears that LANL and the WIPP contractor may achieve 1 shipment per week; however, WIPP shipments could be delayed by a plethora of open safety basis issues. These waste operations lack an integrated risk evaluation. The most effective risk reduction mechanism available is to ship the waste (site rep weekly 12/5/03). NNSA and LANL could consider the limited remaining life of these operations and streamline the controls with the goal of optimizing overall rate of risk reduction.

Plutonium Facility (TA-55): In support of their review of the recently submitted interim Technical Safety Requirements for PF-4 (site rep weekly, 4/1/2005), NNSA has requested that LANL provide a backfit analysis within 90 days characterizing the cost/benefit implications of upgrading the current active confinement system to meet Safety Class requirements. NNSA expects this analysis to clearly articulate the cost differences between upgrading to Safety Significant and Safety Class, respectively. The usefulness of this analysis could be enhanced by first defining what the necessary and sufficient requirements should be for upgrading an existing system.

TA-55 has identified that several employees received measurable Pu-238 uptakes while working in a Pu-239 lab room last June and that one of these received 800 mrem 50-yr CEDE, exceeding the 500 mrem reporting threshold. Investigation continues (site rep weekly 2/25/05).

Facility Management: Many of last year's resumption reviews identified issues involving the roles and responsibilities for facility operations management, as well as needs for standardized tools and appropriate support for the facility management function. A LANL team has thoroughly studied these issues and, this week, made recommendations to LANL senior management. Squarely addressing these issues is necessary for success in the resumption followup; in fact, addressing these issues appears to be a prerequisite for the Operational Efficiency (OE) Project (site rep weekly 3/11/05).

Issue Management: LANL has observed a growing number of late corrective actions intended to respond to resumption review findings; appropriate management attention is being applied on reversing this trend. The LANL Corrective Action Review Board (CARB) is developing its strategy for providing the LANL Director independent assurance that these corrective actions were properly identified, implemented, and sustainable. With continued management support, the CARB could provide a stronger feedback mechanism between identified issues and their corrective actions than previously existed at LANL. Success also hinges on the distributed network of LANL issue management coordinators that will support the CARB in its activities.

Critical Experiments Facility (TA-18): LANL has submitted the start-up notification report (SNR) for resuming critical experiments with uranium on the Planet machine. The SNR requires documentation of the applicable safety controls for these experiments; resolution of issues identified in the Board's letter of July 9, 2003; an independent laboratory readiness assessment; and NNSA restart approval. This deliberate restart approach appears acceptable from a safety basis and operational perspective. From a programmatic priority perspective, LANL will also be required to demonstrate minimal impacts to the Early Move project prior to commencing Planet operations.