

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 30, 2007

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director

FROM: B. Broderick and C. H. Keilers, Jr.

SUBJECT: Los Alamos Report for Week Ending November 30, 2007

Plutonium Facility (TA-55): LANL has proposed a justification for continued operations (JCO) to allow limited material movements in 4 vault rooms and one basement storage location (site rep weekly 10/26/07). The JCO is based on analysis from recently prepared criticality safety evaluations (CSE) that reflect the actual (i.e. "as-found") material present in these locations. The JCO would allow retrieval, but not addition, of items from all locations in vault rooms A and G and from shelves and floor locations in vault rooms B and I. Retrieving items from BISCO-lined drawers in rooms B and I and the basement location are not covered in this JCO because the safety margins for some potential upsets (e.g. dropping a container onto another container during retrieval) are not evaluated in the "as-found" CSEs. However, to support an upcoming required material inventory, the JCO does allow single containers in BISCO-lined drawers to be lifted vertically, inspected, and returned to their original locations.

Activities outside these vault rooms and basement storage location continue to be dispositioned through the lab's internal review and operational release process. A LANS corporate partner is providing two much-needed additional criticality safety engineers beginning Monday. Relatedly, a second dedicated team of criticality safety engineers will begin reviewing unit operations next week. This should alleviate a process choke point and help expedite safe resumption. LANL also intends to identify a single individual to manage and coordinate all aspects of the resumption process.

Transuranic Waste Operations: The Environmental Programs directorate is developing a set of corrective actions and organizational changes to be captured in a forthcoming Deliberate Operations Project Execution Plan (PEP). This is in response to a number of recent safety and operational compliance issues and formal direction from the NNSA site office (site rep weekly 11/9/07).

An external team, consisting of senior-level managers from LANS corporate partners, completed a review this week of the formality of waste operations, and the adequacy and completeness of the draft Deliberate Operations PEP being prepared by the Environmental Programs directorate. Preliminary observations included: • funding has not been allocated to implement a new, compliant Area G safety basis, whose submittal is pending, • there is no dedicated operations funding devoted to implementing important institutional safety programs, • an organizational tolerance of substandard conditions has become normalized within the directorate. A final report is expected by December 13th.

Additionally, the WCRR repackaging facility has faced challenges in effectively implementing controls to prohibit the receipt of drums with unvented inner containers that could retain significant amounts of hydrogen. Receipt of prohibited drums has resulted in two recent Technical Safety Requirement (TSR) violations at WCRR. Last week, LANL submitted a safety basis addendum and TSR changes that address this issue by allowing unvented inner waste packages of up to 30 gallons to be breached and remediated in the WCRR glovebox. Five new TSR-level specific administrative controls have been identified to support this new activity. New controls include the use of a lid restraining device during container breaching, 30 minute cessation of glovebox operations after breaching to allow hydrogen diffusion, and ignition-source controls related to electrical grounding of unvented containers, de-energizing glovebox receptacles, and use of non-sparking tools (site rep weeklies 11/2/07, 10/5/07).