

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 23, 2007

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: B. Broderick and C. H. Keilers, Jr.
SUBJECT: Los Alamos Report for Week Ending February 23, 2007

T. Davis was here this week augmenting site rep coverage.

Transuranic (TRU) Waste Operations: The Chief of Defense Nuclear Safety was on-site this week, working with LANL and local NNSA personnel on the development of a safety basis for repackaging high-activity drums under a temporary exemption to the nuclear safety management rule (10 CFR 830). LANL's objective is that this safety basis would be compliant, only lacking a federal safety evaluation report, which NNSA and LANL expect will follow at a later date (site rep weekly 2/2/07).

Radioactive Liquid Waste Treatment Facility (RLWTF): RLWTF is close to receiving its first transfer of TRU liquid waste from TA-55 to the new caustic tank; this is the first of several milestones toward LANL re-establishing reliable TRU liquid waste processing capability.

Unvented TRU Waste Drums: Last October, Area G discovered about three-dozen drums that are unvented, a condition which violates the Area G safety basis since it could result in flammable gas buildup (site rep weekly 10/27/06). LANL segregated the drums. This week, LANL had a hazardous material response team confirm that the segregation was adequate and that the drums are not showing indications of pressure buildup. Area G has equipment but no authorized process for drum venting.

While NNSA and LANL waste management have been fully occupied with addressing the Area G high-activity drums and restoring RLWTF receipt capability, it has been four months since the unvented drums were identified; this seems an inordinately long period without a formal contractor analysis of the risk and the adequacy of interim controls and a formal federal risk acceptance. LANL is close to submitting to NNSA a justification for continued operation for the unvented drums.

Decontamination and Volume Reduction System (DVRS) Facility: LANL lacks capability to size reduce and disposition roughly 650 oversized TRU waste items that are either stored now at Area G or expected to be generated by 2010, mainly from TA-55; many of the existing items are in fiberglass reinforced plywood boxes. Recently, facility management barred receipt of newly generated oversized items because of the lack of a disposition path and commitments made to complete TRU waste shipments from Area G by 2010. This mainly impacts TA-55's efforts to remove large excess contaminated items (e.g., gloveboxes, pencil tanks) and thereby make space for TA-55 modernization.

To reconstitute this capability, LANL plans to restart the DVRS in May for a 4-month campaign as a radiological facility and then to upgrade DVRS and start it up as a Hazard Category 3 nuclear facility in Feb 2008. DVRS started up in 2002 as a radiological facility for this purpose. In 2004, LANL curtailed DVRS operations due to lack of funding. In 2005, LANL modified DVRS by installing a glovebox that was intended to be used for a five-month campaign to repackage high-activity drums; this campaign never started. More recently, the DVRS glovebox was reconsidered for repackaging high-activity drums but was not selected. LANL intends to remove the DVRS glovebox within a few months as a prerequisite for restoring large-item size reduction capability (site rep weeklies 11/10/06, 6/30/06, 9/19/03, 8/23/02).