

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 2, 2005

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** C. H. Keilers, Jr.  
**SUBJECT:** Los Alamos Report for Week Ending December 2, 2005

**Management:** After extensive review, the LANL Corrective Action Review Board (CARB) this week concurred with comments on the resumption corrective action plan for Los Alamos Neutron Science Center (LANSCE) – the first nuclear facility to reach this milestone. The CARB now is reviewing plans for six divisions, including those for the site services contractor (KSL), the Chemistry Division, and the Weapons Engineering Tritium Facility (WETF). The CARB reviews are LANL's primary mechanism to ensure corrective actions are consistent, complete, and sustainable across the institution.

**Nuclear Safety Oversight:** As reported last week, the NNSA Site Office (LASO) started its partial stand-down, involving about two-thirds of its staff, before preparations were complete. Status of those preparations is as follows:

- On Friday (11/25), LASO issued a procedure for managing emergent issues that would have been worked by "paused" federal staff; such issues will now be triaged by LASO senior staff and assigned an owner if deemed essential. The procedure has lists of the baseline essential activities and the 31 continuity team members; assignment of roles and responsibilities for the baseline activities is not stated but assumed to align with prior assignments of team members.
- Subject to LANL senior management approval, LANL has plans and is poised to embed 8 operationally experienced people as institutional oversight within LANL nuclear and higher hazard facilities; this team would report findings daily to LANL management.
- External federal support has been discussed, but none appears to be on site at this time.

**Plutonium 238 Operations:** On Thursday (12/1), LANL began a readiness assessment (RA) on resuming the bench-scale aqueous scrap recovery operation, as well as implementing interim technical safety requirements specific to bench-scale (site rep weeklies 10/14/05, 8/5/05); the NNSA facility rep at TA-55 is observing. In parallel, LANL is improving planning and scheduling of Pu-238 operations, centered on starting up the full-scale aqueous recovery line and addressing the large residue backlog.

On Sep 30<sup>th</sup>, LANL submitted for NNSA approval a process hazard analysis for residue pyrolysis and bench-scale hydroxide precipitation; these are essential operations for reducing risks from the legacy Pu-238 residues and from new residues that will be created by the bench-scale recovery operation when it starts. Most of the legacy residues are now in containers (e.g., slip-lid cans) within plastic bags with filters; the bagged containers have been placed on shelves in storage cages that are due for seismic upgrades. The plan had been to store bagged containers in drums, but the need to do that was obviated by DOE designating ~60 % of the cans as transuranic waste, and they have been removed. While the remaining cans have been inspected and show no exterior damage, internal degradation is likely occurring and drives the need for timely disposition. NNSA action appears to be the next step on the critical path for residue disposition but also appears to be impacted by the LASO pause.

**Waste Operations:** On Wednesday (11/30), LANL discovered that an improperly vented transuranic waste drum had been shipped from TA-54 storage to the TA-50 inspection facility (WCRRF). The drum had a metal clip between the drum body and lid instead of a vent filter in the lid; the clip created a vent path that prevents gas buildup but is unfiltered. To prevent recurrence, LANL is improving procedures and operator training, as well as looking for indicators of other such drums in storage.