

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 24, 2003

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** C. H. Keilers, Jr.  
**SUBJECT:** Los Alamos Report for Week Ending January 24, 2003

**Safety-Related Infrastructure:** Senator Pete Domenici's office issued a press release this afternoon indicating DOE will restore the \$75M Cerro Grande recovery funding suspended on January 9<sup>th</sup>.

**Radiochemistry Laboratory (TA-48):** This week, LANL began a readiness assessment (RA) to verify implementation of the new TA-48 authorization basis for Hazard Category 3 nuclear operations (site rep weekly 1/10/03). One key area being assessed is the facility's ability to manage and control its radioactive inventory and thereby assure that assumptions made in accident analyses are not violated. Inventory management and control is also a key factor if TA-48 is to be downgraded to a radiological facility in the near future. The site rep understands that the LANL RA team is identifying problems in this and other areas. A staff review of TA-48 is scheduled for next Thursday.

**Plutonium Facility (TA-55):** The Fire Protection Yard Main Replacement Project is nearly completed. Last Sunday, workers removed the cross-over valve between the old and new fire water loops and placed TA-55 buildings entirely on the new loop. This eliminates the possibility of some accident scenarios involving a rupture of the old loop impairing the new loop. Seismic upgrades on the two pump houses and associated tanks are also complete. Remaining work primarily involves removing old components, grouting the old loop in place, and backfilling trenches.

**Decommissioning Activities:** The Omega West beryllium reflector was successfully removed from the reactor in one piece earlier this month and is scheduled to be shipped to TA-54 in mid-March (site rep weekly 12/27/02). While radiation levels were 3 to 5 times higher than expected (i.e., 5,000 R/hr), the highest individual exposure was 40 mrem – an indicator of a well-executed activity. Workers this past weekend were removing other reactor internals, and again found radiation levels about 5 times higher than expected (about 3 R/hr). They proceeded with the job, and collectively received a dose higher than originally expected. Two workers may have received doses of about a Rem each. Generally, Omega West decommissioning activities have gone well, but the level of radiological protection supervision and the work suspension limits (i.e., when to stop and reassess) may warrant review.

**Authorization Basis (AB):** The NNSA Site Office has rejected the TA-54 (Area G) AB upgrade package, submitted by LANL on January 10<sup>th</sup>. The primary issues appear to be level of completeness and adequacy of addressing previous NNSA comments. NNSA and LANL have concluded that the current TA-55 AB complies with the nuclear safety management rule (10 CFR 830) and have postponed action on that update. In the last week, LANL submitted the packages for the TA-50 Radioactive Liquid Waste Treatment Facility and for the TA-50 Waste Characterization, Reduction, and Repackaging Facility (WCRR). Currently, a high-quality upgrade for TA-54 appears to be the limiting step for LANL reaching the milestone of having submitted compliant ABs by April 2003.

**Radiation Protection:** Last week, the NNSA Site Office formally raised questions on an apparent low level of objective evidence supporting a LANL triennial assessment of occupational radiation protection. NNSA informally requested supporting documentation in November and December and is pursuing this in order to validate the LANL assessment process and results.