

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 8, 2013

MEMORANDUM FOR: S. A. Stokes, Acting Technical Director
FROM: R.T. Davis and R.K. Verhaagen
SUBJECT: Los Alamos Report for Week Ending March 8, 2013

Area G – Below-Ground Transuranic (TRU) Waste Disposition: In response to a commitment in the Framework Agreement with the New Mexico Environment Department addressing TRU waste in Area G, LANL has developed a schedule for disposition of the below-ground waste requiring retrieval. The plan includes pacing milestones that will achieve removal of 2,395 cubic meters of TRU waste from Trenches A-D, Pit 9, corrugated metal pipes, and multiple shafts containing hot cell liners, tritium packages and 55 gallon waste drums, by September 30, 2018. The waste contained in these locations represents approximately 110,000 Plutonium Equivalent Curies (PE-Ci) of material at risk (99.9% of retrievable below-ground TRU waste). The plan is paced such that the amount of below-ground waste that is accumulated above-ground is minimized.

The remainder of the below-ground waste is contained within 33 shafts that house approximately 3.4 cubic meters of TRU waste containing approximately 97 PE-Ci of material at risk. The estimated cost and complexity of retrieval are both expected to be very high. As such, LANL has committed to complete an evaluation of the necessity to retrieve the waste contained within these shafts by September 30, 2015. If it is determined that retrieval of the TRU waste from the shafts is necessary, LANL plans to commence these activities in FY 2020 and last through FY 2022.

Technical Area-35 (TA-35): This week, LANL completed a Management Self Assessment (MSA) of TA-35 Buildings 2 and 27 to evaluate implementation of conduct of operations and the nuclear criticality safety program. The MSA was intended to help management evaluate improvements as part of the recovery plan for previous criticality safety issues and was focused on programs that support “nature of the process” controls and arguments for hazard categorization consistent with DOE-STD-1027. LANL recently submitted a revised Facility Hazard Categorization (FHC) that is currently under review by the field office. Activities at TA-35 Buildings 2 and 27 support training programs including nondestructive assay training for International Atomic Energy Association inspectors.

The MSA review team identified 12 findings and 2 observations primarily related to conduct of operations and training including issues in the following areas: lock-out/tag-out program; caution tag implementation; procedural compliance; training; conduct of management observation and verification reviews; building accountability; and operator aids. LANL is working on corrective actions that address the specific issues along with extent of condition reviews to ensure systemic programmatic issues are addressed. LANL is also continuing recovery plan actions and will implement controls identified in the revised FHC following field office approval.

Criticality Safety: LANL completed their quarterly assessment of the criticality safety program metrics last week as part of their overall program improvement plan. The report documents the increase in backlog of criticality safety work due to staffing issues and reiterates the group’s focus on ensuring safe operations in the field. Next week, the Criticality Safety Support Group (CSSG) will be at LANL to assess the program with a focus on capability and capacity of the current LANL criticality safety staff to support nuclear operations. The team will also be looking at the corrective action plan developed in response to the 2012 CSSG review at LANL.