

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 1, 2009

MEMORANDUM FOR: T. J. Dwyer, Technical Director
FROM: B. Broderick and R.T. Davis
SUBJECT: Los Alamos Report for Week Ending May 1, 2009

Plutonium Facility: In late-March, LANL completed the TA-55 Facility Improvement Implementation Plan for TA-55 infrastructure investment to support a long-term plutonium capability at Los Alamos. The upgrades required to transition from a passive confinement strategy to an active confinement strategy (e.g., improvements identified in the DSA) have been captured in the Safety System Upgrade Project (SSUP) and are a part of this overall plan. A project management plan for the SSUP was provided to the site office in accordance with a DSA condition of approval. This plan includes the preliminary scope definitions, execution schedules and cost estimates for 30 subprojects including ventilation system modeling and upgrades, glovebox stand seismic upgrades and fire suppression system upgrades. To support these plans, backfit analyses are required for several systems that will be upgraded to safety class. The ventilation system backfit analysis is expected to be complete in the next two months and will include evaluation against PC-3 seismic criteria.

Transuranic Waste Operations: LANL is pursuing several initiatives to increase the throughput and capability to process and ship solid transuranic waste and achieve closure of Area G by 2015. To support these initiatives, an Area G safety basis change package is under review by the NNSA site office that would allow debris waste repackaging activities involving up to 15 PE-Ci (30 times the current limit) and waste storage of up to 56 PE-Ci (120 times the current limit) of material at the Decontamination and Volume Reduction System (DVRS) Facility. No new controls are identified for higher activity repackaging and DVRS Facility storage activities in the safety basis submittal.

LANL management intends to award a contract early this month to install a debris waste repackaging line inside DVRS. LANL also plans to pursue a 2nd repackaging line at DVRS in the near future. This additional capability, along with the addition of a 2nd shift at WCRR, is expected to allow shipment of the remaining above ground debris waste drums by spring 2010. At that point, LANL intends to pursue upgrades at WCRR (e.g., glovebox fire suppression) prior to the below ground campaign. To support Area G closure, LANL is also conducting life extension studies for WCRR and RANT. The results of these studies will be factored into the plans for WCRR upgrades. Other engineering studies to determine the optimum solution for the enduring transuranic waste mission (i.e., after Area G closure) are ongoing and will be presented at the July Integrated Nuclear Planning workshop.

Additionally, there are 16 remote handled canisters stored in Area G that LANL plans to retrieve and configure for offsite shipment. The Joint Evaluation Team, which determines the LANL recommendation for level of startup review, evaluated this activity and determined that a laboratory readiness assessment (LRA) was appropriate. Based on "urgent operational needs" that appear to be driven by the schedule and availability of shipping assets managed by the Department of Energy (DOE-EM), the site office requested that LANL provide actions needed to augment the management self assessment in lieu of the previously planned LRA. In response to this request, LANL proposed several steps to strengthen the MSA including augmenting the review team with experienced off-site personnel to improve the independence of the assessment. On Friday (5/1), the NNSA site office approved the change to verify readiness to perform these activities through an MSA vice an LRA. The augmented MSA is scheduled to begin the week of May 11th.