

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 1, 2013

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.T. Davis and R.K. Verhaagen
SUBJECT: Los Alamos Report for Week Ending November 1, 2013

The Laboratory Director announced that Cheryl Cabbil has been selected to take over as the LANL Associate Director for Nuclear and High Hazard Operations on December 2, 2013. Ms. Cabbil was previously the vice president for Environment, Safety, Health, and Quality Assurance for URS/CH2M Oak Ridge, LLC.

Material Recycle and Recovery (MR&R): The LANL MR&R program is focused on the disposition and management of nuclear materials to meet programmatic needs (including risk reduction activities) and support strategic plans for enduring national missions. In Fiscal Year (FY) 2013, LANL received additional funding to support an accelerated nuclear material disposition project that includes disposal of 1.4 metric tons of nuclear material with “no defined use” by 2018. As part of this project, accelerated vault recovery eliminates legacy vault materials and will provide greater operational flexibility for future laboratory missions. In FY 2013, the LANL MR&R program completed the following accelerated vault recovery items: 1) removal of all non-standard containers from one vault room to allow access without respirator protection; 2) identification of vault items categorized into appropriate disposition campaign categories (includes more than 7000 items); 3) stabilization/disposition of 400 kg Pu-239 equivalent; and 4) disposition of 234 containers. In addition, the MR&R program completed installation of the High Energy Neutron Counter at Technical Area-55 to support transuranic waste disposition.

Area G – Safety Basis: This week, LANL submitted two safety basis addendums for the currently implemented Area G Basis for Interim Operations to the field office for review and approval. The first addendum will allow operators to open sealed inner containers with bolted lids/flanges during Sort, Segregate, Size-Reduction, and Repackaging activities. The addendum for this activity identifies additional specific administrative controls to reduce the likelihood and consequence of a deflagration that include: 1) ceasing spark-producing activities prior to loosening the lid/flange bolts; 2) the use of non-sparking processes and tools; 3) ensuring the workers and drums are grounded/bonded; and 4) loosening lid/flange bolts sufficiently to break the seal allowing the drum to vent without completely removing the bolts. The second addendum will allow gas generation testing (GGT) of a small number of transuranic waste drums to ensure they meet shipping requirements. This addendum credits an existing specific administrative control to ensure that drums processed through GGT have less than 200 PE-Ci.

Confinement Vessel Disposition (CVD) Project: On Wednesday, the field office transmitted the final CVD Operational Readiness Review (ORR) report to LANL for action. In addition to a corrective action plan for the identified findings, the field office requested the following: 1) the list and qualifications of personnel designated as senior supervisory watch; 2) LANL approach to ensure adequate formality of operations and approach for rigorous closure of pre-start findings; 3) LANL actions to ensure and verify sustained performance for formality of operations and criticality safety; and 4) effectiveness evaluation for actions identified in the LANL Continuous Improvement Plan for Conduct of Operations based on the weaknesses identified in the ORR report. The field office also requested LANL to identify lessons learned for application to future readiness activities.