

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 10, 2013

MEMORANDUM FOR: S. A. Stokes, Acting Technical Director
FROM: R.T. Davis and R.K. Verhaagen
SUBJECT: Los Alamos Report for Week Ending May 10, 2013

Chemistry and Metallurgy Research (CMR) Building – Confinement Vessel Disposition

(CVD) Project: This week, LANL completed the Contractor Operational Readiness Review (CORR) for the CVD project. The CORR team concluded that following adequate closure of their 15 pre-start findings, CVD operations could be safely executed. The team also identified 11 post-start findings and 13 observations. Although there were a significant number of findings, the team lead noted that operators and supervisors demonstrated excellent process knowledge and conduct of operations. The review team also concluded that the pre-starts did not represent indications of systemic failures in CVD operations.

Criticality Safety: The LANL Nuclear Criticality Safety Committee (NCSC), chaired by the Principal Associate Director for Operations and Business, met this week to review the status of the corrective action plan, results from recent evaluations and assessments, and progress on criticality safety analyst training and qualification. The committee decided to move forward with selection and inclusion of criticality safety experts (both internal and external to LANL) as part of the NCSC, which is consistent with a recent recommendation from the DOE Criticality Safety Support Group.

Safety Basis: LANL submitted an Evaluation of the Safety of the Situation (ESS) to the field office associated with increased airport traffic at the Los Alamos County Airport (see 4/12/13 weekly). An Unreviewed Safety Question (USQ) for the RANT shipping facility was identified based on the increase in flight traffic causing the frequency of the aircraft crash scenario to cross the threshold from beyond extremely unlikely to extremely unlikely. The evaluation did not identify USQs for other LANL nuclear facilities. In accordance with DOE-STD-3014-2006, *Accident Analysis for Aircraft Crash into Hazardous Facilities*, the RANT Documented Safety Analysis (DSA) must now include an aircraft crash as a design basis accident vice the beyond design basis accident recognized in the current DSA. The ESS identified that LANL will update the DSA to include an aircraft crash as a design basis accident in the next annual DSA revision.

Weapons Engineering Tritium Facility (WETF): This week, LANL began overpacking AL-M1 tritium containers into Flanged Tritium Waste Containers for disposal at Area G. Some of these AL-M1s have a history of leaking and others have been identified as having the potential to leak in the future (see 2/15/13 weekly). Disposal of the AL-M1s represents the first of many activities needed to de-inventory excess tritium currently stored in WETF.

WETF personnel identified expired calibrations for subcomponents associated with the safety significant environmental chamber over temperature protection system (ECOPS). The system was declared inoperable and the appropriate limiting condition of operation was entered. The calibration was checked as satisfactory during the previous annual inspection of the ECOPS last fall; however, WETF personnel did not capture the calibration expiration date to drive the due date for the next surveillance as required by the procedure (the subcomponent has a calibration periodicity of 18 months). During a critique of this event, WETF management identified actions to improve the surveillance procedure and perform an extent of condition review.