DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 5, 2012

MEMORANDUM FOR: T. J. Dwyer, Technical Director **FROM:** R.T. Davis and R.K. Verhaagen

SUBJECT: Los Alamos Report for Week Ending October 5, 2012

Radioactive Liquid Waste Treatment Facility – Upgrade Project (RLWTF-UP): Last week, LANL submitted a revision to the Safety Design Strategy (SDS) for the RLWTF-UP to the site office for approval. In 2011, NNSA approved a contractor proposal to separate the transuranic and low-level waste processes into individual structures. Low-level liquid waste processing will be conducted in a radiological facility (i.e., less than hazard category 3) planned for completion in 2017. Transuranic liquid waste processing will be conducted in a hazard category 3 nuclear facility planned for completion in 2020. The updated SDS reflects this separation and also incorporates previous comments from the site office. LANL is currently conducting a siting study for the transuranic facility to determine the optimum separation from the radiological facility. Critical decision-2, *Approve Performance Baseline*, is currently planned for December, 2012, for the low-level waste portion of the project.

Work Planning and Control. There have been several issues with LANL work planning and control this week. Two of the more significant failures to properly control work included:

At PF-4, construction personnel removed the automatic closing mechanism from an operable safety class confinement door while reinstalling trim. The PF-4 safety basis requires the confinement doors to be capable of closing automatically via this automatic door closure device. The trim work had not been authorized on the plan of the day and had not been released by the PF-4 operations center. Contributing to this unauthorized maintenance, the integrated work document for door modifications did not specify a sequence to complete door restoration and operability testing.

At the Chemistry and Metallurgy Research facility, electricians preparing to perform corrective maintenance on an elevator installed their lockout/tagouts (LO/TO) on the incorrect power isolation. An independent verifier (IV) identified the breaker specified on the LO/TO did not match the current location of the LO/TO. Instead of stopping work and informing management as required, the electricians removed their LO/TO to reinstall it on the specified circuit breaker. The electricians once again hung their LO/TO on an incorrect power isolation, but this time the IV did not identify the discrepancy when he reviewed the LO/TO. No work was performed on energized equipment before the discrepancy was discovered. Contributing to this issue, instructions in the integrated work document did not direct workers where to install the LO/TO, but rather relied on an attachment to communicate this important information.

Area G Drum Venting System (DVS) Federal Readiness Assessment (FRA). On Thursday, the FRA team presented their outbrief for the DVS readiness assessment. In total there were 18 prestart findings, 14 post-start findings, and 48 observations. The FRA team concluded that the contractor had not successfully demonstrated readiness for hazard category 2/3 drum venting operations in Area G. This conclusion was based in large part on the number and severity of the findings. Many of the findings were attributed to inappropriate TSR control selection and development, and a reliance on specific administrative controls vice engineered controls. The final assessment report is expected to be issued next week.