

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 27, 2013

MEMORANDUM FOR: S.A. Stokes, Technical Director
FROM: R.T. Davis, R.K. Verhaagen, and J.W. Plaue
SUBJECT: Los Alamos Report for Week Ending December 27, 2013

LANL operations closed on Tuesday night for the annual winter holiday break. Operations will resume on January 2, 2014. The Site Representative office was closed Wednesday through Friday.

Chemistry and Metallurgy Research (CMR) Building–Exit Strategy: In guidance issued nearly two years ago (see 2/17/12 weekly), NNSA identified a revised target of approximately 2019 to complete the orderly phase out of programmatic activities from CMR. LANL planners currently indicate that the critical path to achieving this target includes actions to repurpose certain rooms in the Plutonium Facility (PF-4) to support analytical chemistry and materials characterization activities. LANL requires this repurposing because the new Radiological Laboratory Utility Office Building (RLUOB) will not provide all of the capabilities and associated capacities required to meet anticipated program commitments. The repurposing of PF-4 rooms will require: (1) removal of contaminated equipment from at least three rooms, (2) procurement and installation of new equipment into these rooms, (3) completion of readiness activities, and (4) validation of results against parallel testing performed on existing equipment in CMR.

The Site Representatives note that accomplishing the repurposing in the remaining five-year period will be challenging in an operating nuclear facility. In addition, recent Congressional direction may constrain the amount of repurposing work LANL can undertake until a line item project is established. If LANL cannot accomplish the repurposing in time, they will need to examine tradeoffs between continuing programmatic activities in CMR, utilizing off-site vendors, and limiting support to the program. In early 2014, NNSA expects to issue high-level program direction for this effort and an execution plan covering the RLUOB installation activities for the remainder of fiscal year 2014.

Radioactive Liquid Waste Treatment Facility (RLWTF): The field office recently issued a Safety Evaluation Report that approved a new Documented Safety Analysis (DSA) and Technical Safety Requirements. The RLWTF is a hazard category 3 nuclear facility that collects, stores, and processes low-level and transuranic liquid wastes. The new DSA replaces a safety basis that was developed and approved in 1995. Based on the analyzed potential consequences to the public and workers, no safety-related structures, systems, or components are identified; however, defense-in-depth controls in the DSA are identified as Other Equipment Important to Safety (OEITS) consistent with the LANL technical guidance (see 10/25/13 weekly). The safety basis also includes an overall facility material-at-risk limit of 55 Ci of americium-241 equivalent. RLWTF management is now pursuing implementation, including conduct of an Implementation Verification Review.