

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 15, 2014

**MEMORANDUM FOR:** S.A. Stokes, Technical Director  
**FROM:** R.K. Verhaagen and J.W. Plaué  
**SUBJECT:** Los Alamos Report for Week Ending August 15, 2014

**DNFSB Staff Activity:** R.K. Verhaagen remained on leave and J.W. Plaué began leave Wednesday.

**Plutonium Infrastructure Strategy:** Late last month, the field office approved the Safety Design Strategy (SDS) for the new Plutonium Equipment Installation (PEI) sub-project of the Chemistry and Metallurgy Research Replacement project line item. PEI is one of two new subprojects included in a revised *Mission Need Statement* and a *Program Requirements Document*, which NNSA approved on July 3, 2014. The other sub-project is RLUOB Equipment Installation Phase 2 (REI2). PEI and REI2 constitute the first two phases of the Plutonium Strategy and are necessary to establish appropriate enduring analytical chemistry and materials characterization capabilities and capacities and to facilitate termination of programmatic operations in the existing Chemistry and Metallurgy Research building.

The PEI sub-project will repurpose several rooms in the Plutonium Facility by the removal of existing equipment and installation of new gloveboxes and associated equipment. The SDS notes the sub-project was screened against the criteria in DOE-STD-1189 and determined not to represent a major modification. The Chief of Defense Nuclear Safety concurred on the SDS and provided several comments for consideration, notably including the need to improve discussion on the challenges and the controls needed to perform PEI scope in an operating nuclear facility and the need to discuss anticipated demands of new equipment on the capacities of existing safety-related support systems.

**Weapons Engineering Tritium Facility (WETF):** Last Friday, LANL submitted to the field office the third revision of the Evaluation of the Safety of the Situation (ESS) for the issue associated with the Oxygen Monitoring System (OMS). The ESS was accompanied with the final report from the Root Cause Failure Analysis Team (see 6/13/14 weekly). The ESS asserts that the OMS can be declared operable based on a successful seven day calibration check, but proposes restricting tritium processing until completion of the first monthly as-found calibration check and completion of both the contractor and federal readiness assessments.

**Startup and Restart:** On Tuesday, LANL's Joint Evaluation Team (JET) convened to review the readiness review determinations for the restart of loading activities for UC609 tritium shipping containers at WETF and the restart of the TBase 2 lathe in the Plutonium Facility. The latter restart represents the first of likely ten upcoming readiness assessments to support full resumption of programmatic operations. The JET determined that both activities require federal readiness assessments pending approval by the field office.

**Emergency Preparedness:** LANL personnel recently issued the after-action report for the functional exercise of the Emergency Operations Centers (EOC) involving a significant seismic event (see 6/20/14 weekly). Overall, LANL met 76 of the 80 established exercise objectives with one finding and three objectives either not observed or applicable. The finding involved the lack of familiarity of one of the section chiefs with the EOC chain of command. EOC personnel investigated the issue and determined that the chief had not received either initial or refresher training. Additional follow-up revealed several other members of the Emergency Response Organization that were unfamiliar with basic EOC processes. Other notable opportunities for improvement include a field office identified issue to develop predetermined situational awareness information for display on the large electronic wall, the need for training on aspects of WebEOC, and the need to strengthen the conduct and physical arrangements for tabletop field play.