

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 31, 2014

**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 January 31, 2014

**DNFSB Staff Activity:** This week, staff members Dunlevy and McCoy conducted a review of the Area G safety basis. As a result of questions raised by the staff, Area G management declared a Potential Inadequacy of the Safety Analysis (PISA) and entered a second issue into the New Information process to screen it for status as a PISA. On Wednesday, the Site Representatives attended a meeting of the Northern New Mexico Citizens' Advisory Board focused on transuranic waste disposition activities at Area G.

**Federal Oversight:** Effective this week, Ms. Kimberly Davis Lebak is the manager of the field office. On Wednesday, the field office issued the annual workforce staffing analysis for the safety engineering team. The analysis indicates a full on-board complement of four safety system oversight engineers, one technical training specialist, and one maintenance manager; however, the analysis also identifies a shortfall of two fire protection engineers.

**Contract Management:** On Wednesday, NNSA released the fiscal year 2013 Performance Evaluation Report that details the basis of the fee determination for LANL. Overall, LANL earned an 89 % with a 49 % for Operations and Management, which covers most nuclear safety related topical areas.

**Plutonium Facility–Seismic Safety:** PF-4 personnel completed actions to wrap the captured short columns with fiber-reinforced polymer (see 12/13/13 weekly). This action improved the ability of the facility to withstand a seismic event. Design activities are underway to wrap the roof girders, which is the next significant structural improvement planned to commence later this year.

**Plutonium Facility–Safety Basis:** On Monday, the field office forwarded to NNSA Headquarters for approval a revised Safety Evaluation Report (SER) for the *TA-55 Documented Safety Analysis Addendum in Response to Nonlinear Seismic Analysis Results*. The field office recommended approval of the revised SER, which incorporates the results of LANL analysis of the facility structural performance against Section 9.3.6 of DOE-STD-1020-2012. The field office also noted that LANL's analysis methodology of combining fragilities may go beyond the intent of the standard for existing facilities and therefore may warrant additional Headquarters guidance.

**Plutonium Facility–Criticality Safety:** Last Friday, LANL submitted to the field office for approval a listing of 45 fissile material operations (FMOs) assessed to have an adequate technical basis to support resumption. This list builds upon the previous list of 228 FMOs approved by the field office last November (see 11/15/13 weekly). For these FMOs, LANL has concluded that there is adequate technical basis to have high confidence that the currently identified criticality safety controls are adequate. Several of the FMOs in these lists rely on alternative evaluations types that do not meet DOE expectations for criticality safety evaluations. LANL personnel are currently developing modern technical bases intended to facilitate rapid issuance of compliant evaluations; however, they do not intend to use these bases to develop compliant evaluations for the low risk operations until sometime after operations have resumed.