

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 26, 2013

**MEMORANDUM FOR:** S. A. Stokes, Acting Technical Director  
**FROM:** R.T. Davis and R.K. Verhaagen  
**SUBJECT:** Los Alamos Report for Week Ending April 26, 2013

Staff members M. Horr and B. Sharpless were onsite this week to observe the Contractor Readiness Assessment (CRA) of oversized container Sorting, Segregating, Size-Reducing, and Repackaging activities in Area G, Dome 375. The staff observed field operations and interviews conducted by the CRA team. Based on feedback from the staff, the CRA team is revising their implementation plan (IP) to include specific criteria for each IP core requirement as required by the LANL readiness procedure. The CRA is scheduled to continue through the end of next week.

**Weapons Engineering Tritium Facility (WETF):** LANL continues to struggle with achieving sustainable tritium processing capability at WETF, which is needed to support de-inventory activities. The following items highlight recent issues with restarting WETF tritium operations:

- **Management Self Assessment (MSA):** This week, the MSA team completed their review of tritium operations and concluded that WETF is not ready for operations. The team identified that the current gap between the WETF operational readiness status and that required for a Hazard Category 2 Nuclear Facility is too large to recommend startup. From a high level standpoint, the MSA team concluded that there were significant issues associated with the organization structures, work processes (including the backlog of unresolved issues) and plant equipment. In addition to a number of readiness prerequisites that were not met, the team identified 15 pre-start and 14 post-start findings.
- **Safety System Oversight (SSO) Review:** The field office recently completed a SSO review of contractor-approved conduct of engineering variances and alternate methods (mostly related to pressure safety issues at WETF). The review identified five findings including a significant concern with the LANL review and basis for approving variances. The SSO team concluded that many variances: 1) are not compliant with ASME pressure safety requirements; 2) potentially constitute unreviewed safety questions based on the need for compensatory measures and/or operating restrictions; and 3) were inappropriately approved by the LANL Site Chief Engineer. LANL and WETF personnel are reviewing the assessment report.

**Criticality Safety:** This week, LANL completed a review of the adequacy of closed corrective actions taken in response to previous criticality safety assessments. This review was performed as part of the corrective action plan to strengthen and improve the criticality safety program and to respond to findings identified by an April 2012 NNSA Criticality Safety Support Group (CSSG) assessment (see 11/16/12 weekly). Among other things, the review identified: 1) that 12 issues tracked to closure in the LANL Performance Feedback and Improvement Tracking System lacked sufficient closure documentation; 2) 103 comments received from the field office should be reopened due to insufficient evidence that necessary changes to criticality safety technical documents had been made; and 3) several Criticality Safety Evaluation Documents with comments questioning their adequacy that had not been resolved in a timely manner. LANL is currently working to prioritize all issues that have been identified with the criticality safety program in order to focus available resources on implementing effective corrective actions.