

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 21, 2011

MEMORANDUM FOR: Timothy Dwyer, Technical Director
FROM: Jonathan Plaue, DNFSB Site Representative
SUBJECT: LLNL Activity Report for Week Ending January 21, 2011

Feedback and Improvement: On January 14, 2011, the Nuclear Materials Technology Program (NMTP) held a periodic safety and security briefing for personnel. Attendance at these briefings is required for personnel with unescorted access to the Radioactive Materials Area in the Plutonium Facility and is suggested for all other NMTP personnel. NMTP personnel provided the usual updates on Health Physics, occurrence reports, and facility event reports for the period since the last briefing. Additional topics of interest included the following:

- An update on the ongoing revision to the *NMTP Work Planning and Control Manual*
- An update on changes to the *NMTP Conduct of Operations Manual* and related operational goals for the year
- A discussion on the NMTP Grassroots Safety Committee
- A summary of the observations made by the Board's staff during their November 2010 review of the nuclear facility training program

Work Planning and Control: On January 18, 2011, the Contractor Assurance Office presented to the Livermore Site Office (LSO) the results of a laboratory-wide performance analysis of work control events. The analysis was performed as part of the response to concerns expressed by LSO in a letter dated August 31, 2010 (see weekly report dated September 3, 2010). The analysis examined 24 events that occurred from January through August 2010. The analyzed events that occurred in the NMTP nuclear facilities included the actuation of a legacy alarm system, the continuous air monitor alarm associated with opening a legacy package, and the unexpected exothermic reaction experienced while processing a uranium-lithium item. Overall, the performance analysis concluded that the two most frequent causes of the work control events were errors associated with hazard analysis and scope of work definition. The Laboratory's Work Control Review Board has been tasked to disposition the issues identified in the analysis and develop improvement actions.

Separately, last month NMTP completed a revision to the *NMTP Work Planning and Control Manual*. This revision represents one of the key actions taken in response to the Board letter dated June 14, 2010. LSO is currently reviewing the manual and the procedure for development and implementation of Operational Safety Plans (OSP). The OSP procedure—which has not been revised—is a separate document and is intended to provide workers with information on how to develop work control documents for routine, programmatic work. The manual is expected to be implemented later this winter following any changes resulting from the LSO review.

Structural Inspection: Last month, an engineer from the Service Center assisted LSO staff in the performance of a structural condition walkthrough inspection of the NMTP nuclear facilities. Each of the nuclear facility structures was examined, with additional focus on the supply tanks for the fire suppression system and final stage HEPA filtration system in the Plutonium Facility. The inspection found all of the structures to be in good condition.