

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 7, 2006

MEMORANDUM FOR: J. K. Fortenberry, Technical Director
FROM: Michael J. Merritt, DNFSB Site Representative
SUBJECT: Lawrence Livermore National Laboratory (LLNL)
Report for Week Ending April 7, 2006

Nuclear Material Inspection and Packaging: On March 28, 2006, LLNL requested Livermore Site Office (LSO) approval to inspect and repackage 34 containers of nuclear material stored in the Plutonium Facility. The 34 items do not currently have ES&H labels that provide the Fissile Material Handlers (FMHs) with information necessary to determine whether criticality safety limits can be met for the receiving workstation. The absence of the ES&H label indicates that the internal packaging configuration is uncertain and the presence of beryllium, plastic, or other moderating or reflecting materials can not be determined. The ES&H labeling process was initially instituted in 1998 when approximately 1900 stored items lacked the information necessary to complete the labels. LLNL was able to work off all but 34 items prior to the facility stand-down in January 2005.

LLNL is requesting that LSO approve the inspection, repackaging, and processing of the 34 items using currently approved Operational Safety Plans (OSPs) and will perform the activity within the existing five kilogram fuel-grade plutonium equivalent room limit. However, some of the workstations covered by the required OSPs have not yet achieved operational status using the resumption process (see weekly report dated March 24, 2006). The resumption process for the workstations has begun and trial period operations are expected to be approved in the near future.

Configuration Management: The attachment to the October 26, 2005, letter to the Board from the Administrator of the National Nuclear Security Administration, contains a resource loaded schedule for implementing a configuration management (CM) program for vital safety systems at LLNL's defense nuclear facilities. Based on changes in resource allocation and a realization of the value of coupling implementation of CM with implementation of the new documented safety analysis (DSA) for the Plutonium Facility, Nuclear Materials Technology Program (NMTP) management has recently committed to re-baselining the schedule. The new schedule is expected to be developed concurrent with DSA implementation plan development, which is pending issuance of the LSO Safety Evaluation Report. As described in the referenced letter for the original schedule, the new CM integrated schedule is expected to be supported by a project execution plan and a risk management plan.

Plutonium Facility Path Forward: LLNL provided a readiness assessment (RA) plan to LSO this week that defines a path forward to return to normal operations. LLNL has defined normal operations as those activities that were approved and authorized prior to the stand-down of the facility on January 15, 2005. LLNL has communicated its intent to request LSO approval to remove current limitations and compensatory measures following completion of the RA and closure of any pre-start issues. LLNL has provided justification supporting this approach including completion of all corrective actions associated with the Technical Safety Requirements (TSR) recovery plans. Facility management has also verified closure of corrective actions that address issues identified in numerous assessments during the past year. The RA is scheduled to begin the week of April 17, 2006.