DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 14, 2009

MEMORANDUM FOR: Timothy Dwyer, Technical Director

FROM: Jonathan Plaue, DNFSB Site Representative

SUBJECT: LLNL Activity Report for Week Ending August 14, 2009

Board Member J. Bader and staff member J. Anderson were at the laboratory this week. Focus areas for the visit included discussions on the status of corrective actions and other changes resulting from the December 2008 glovebox over pressurization event, improvements to the work planning and control process, and configuration management. Ongoing activities were also walked-down in the Superblock and the Radioactive and Hazardous Waste Management facilities.

Institutional Processes: On May 20, 2009, the laboratory transmitted the results of a selfassessment on the Unreviewed Safety Question (USQ) process. The assessment found that significant improvements in the overall process had been made during the past few years; however, deficiencies still remained regarding the requirement to ensure that all changes to procedures were entered into the USQ process. In particular, the report states that some procedures that should be subject to the USQ process have not been identified and treated as such. Based on limited inquiries performed during the self-assessment, at least 65 of these candidate procedures were found. A comprehensive effort has yet to be completed to identify all procedures that exist and then screen those that should be subject to the USQ process. The procedures in question vary substantially in nature and utilize a range of formality in document control mechanisms. Currently, only procedures primarily used by the facility operations staff are entered into the Enterprise Configuration Management System. As a result, the identification of the universe of procedures will be challenging and additional time will be necessary to fully characterize the extent of condition. The laboratory and the Livermore Site Office have yet to settle on the path forward; however, it appears that the approach will allow some period of continued use of these procedures while they are identified, prioritized, and entered into the USQ process as appropriate. The basis for this approach predominantly relies upon: (1) personnel training on higher tier documents, such as Operational Safety Plans that have been appropriately subject to the USQ process and (2) lack of historical evidence suggesting that these procedures contain language that describes activities outside of the approved safety basis.

Tritium Facility Modernization: The final report for the management self-assessment was issued this week. The team identified a total of 42 issues, including findings of unmet requirements, observations, and opportunities for improvement. The team recommended that 17 of these issues be resolved prior to the laboratory readiness assessment, which is scheduled to begin next week. The more significant of these issues involve the definition and interpretation of the safety function for the safety significant glovebox and several quality assurance-related issues. The laboratory is working aggressively to resolve the issues.