DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 5, 2013

MEMORANDUM FOR: Steven Stokes, Acting Technical Director
FROM: Jonathan Plaue, DNFSB Site Representative
SUBJECT: LLNL Activity Report for Week Ending April 5, 2013

Continuous Improvement: Last week, the Tritium Facility Manager and a Health Physicist from Superblock visited the Los Alamos National Laboratory (LANL) to harvest lessons-learned and best practices regarding plutonium-238 operations. Program personnel currently perform limited work with plutonium-238, but are looking to expand the variety and quantity of work with this isotope as part of the enduring mission portfolio under Security Category III. This visit was intended to bolster expertise within the facility operations staff that oversees the program. The duo plan to conduct a similar visit to the Savannah River Site in mid-April.

Nuclear Material Packaging: Last week, Plutonium Facility management approved a revision to the Facility Safety Plan (FSP). This wholesale revision to the FSP included a number of significant improvements, including codifying the expectations set forth in the Timely Order regarding use of the SAVY container for all movements involving plutonium-238 (see weekly report dated February 15, 2013). Per the FSP, a SAVY container is now required for movement of high-decay heat parts (i.e., materials enriched in plutonium-238) between laboratory rooms and for storage in the vault. This FSP revision does not require use of the SAVY containers for other nuclear materials in-scope of Department of Energy Manual 441.1-1, *Nuclear Material Packaging Manual*. As defined in Manual 441.1-1, these other in-scope nuclear materials could pose the same hazard to workers. However, the FSP only requires these materials to be transported within the facility using "one rigid metal container," which could include such unsuitable containers as a slip-lid egg can or paint can.

Ultimately, the Facility Manager intends to implement routine use of the SAVY containers for all in-scope nuclear materials. The contractor currently possesses SAVY containers and has developed procedures for their use on which workers have been trained. In the Site Representative's opinion the primary impediments to the routine use of the SAVY include: (1) NNSA approval of the technical basis document developed by LANL for the SAVY, (2) issuance of the institutional requirements document implementing the Manual 441.1-1, and (3) a decision on the site's interpretation of flexibilities provided in the Manual for handling of materials outside of engineered contamination barriers or compliant packages.

Configuration Management: Last month, the contractor approved the report from the *Joint Functional Area/Line Management Assessment* (JFLMA) of configuration management (CM) in the nuclear facilities. Overall, the JFLMA team concluded that the CM program was adequately implemented, observed 5 strengths, and noted 16 observations. Observations (defined as a compliant condition that warrants tracking for future improvements) of note include: an effort to develop a cross-walk between glovebox to controlled drawing is not yet complete; there are outstanding red-lined drawings awaiting conversion to electronic format; configuration item owners for Defense-in-depth Equipment Important to Safety display varying degrees of understanding on their roles and responsibilities; and CM expectations for elements of the design process need to be clarified.