

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 28, 2009

**MEMORANDUM FOR:** Timothy Dwyer, Technical Director  
**FROM:** Jonathan Plaue, DNFSB Site Representative  
**SUBJECT:** LLNL Activity Report for Week Ending August 28, 2009

**Management:** The laboratory has entered into a period of increased assessments. As an institution, approximately 40 percent of the roughly 300 assessments planned for fiscal year 2009 have yet to be completed. Specific to the nuclear facilities, the triennial audit mandated by title 10 of the Code of Federal Regulations, part 835, *Occupational Radiation Protection*, began this week for two of the facilities. An assessment on maintenance, performed jointly with the Livermore Site Office (LSO), wrapped up this week. A corporate assist visit began this week to facilitate the laboratory's preparation for the upcoming Integrated Safety Management system Phase II verification and the inspection by the Office of Environment, Safety, and Health Evaluations (HS-64). The HS-64 inspection is a multi-week process scheduled for portions of September and October. Other ongoing or near-term assessments will examine conduct of operations, configuration management, fire protection, and training. Improved planning and coordination could reduce impact and foster the benefits of the necessary assessment process.

**Radioactive and Hazardous Waste Management:** The laboratory readiness assessment for the real-time radiography (RTR) unit began this week. The RTR is one of the characterization methods required to support the upcoming transuranic waste campaign. Non-destructive assay, headspace flammable gas analysis, and TRUPACT II mobile loading operations are also required to support shipping the drum population to the Idaho National Laboratory (INL). These operations will undergo facility readiness reviews in September. The schedule currently shows shipments beginning in late November. Once at INL, the drums will be re-characterized with a similar set of techniques in order to certify their acceptability for permanent disposal at the Waste Isolation Pilot Plant in New Mexico.

While performing decontamination operations in the room associated with the glovebox over pressurization incident, a worker stepped onto the lower guard rail of the scissors lift to improve his reach. Facility management observed this action and instituted a safety pause to reinforce proper industrial safety practices, particularly those associated with elevated work areas. A critique was also performed, which identified weaknesses in work planning. Specifically, it was determined that certain elevated locations could not be easily reached given the tools provided for the job (ladder and scissors lift). The work permit is being modified to support use of appropriate extended-reach equipment.

**Hardened Engineering Test Facility:** On August 24, 2009, LSO issued a safety evaluation report approving a safety basis change request to allow experiments with highly enriched uranium oxide. Previously, only solid forms of fissionable materials were allowed in the facility. No new controls resulted from the revised hazard and accident analyses.