

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 4, 2015

**TO:** Steven A. Stokes, Technical Director  
**FROM:** Matthew P. Duncan, Cognizant Engineer  
**SUBJECT:** Lawrence Livermore National Laboratory Report for November 2015

**Performance Evaluation and Measurement Plan:** The Fiscal Year 2016 Performance Evaluation and Measurement Plan contains several notable key outcomes for the contractor, including:

- Implement a new work planning and control process.
- Partially install a replacement motor control center for the Plutonium Facility. Once operational, this will remove a single-point failure mode in the safety-class emergency power system.
- Repackage plutonium metal oxidation residues and other materials into available pipe overpack containers.
- Improve emergency preparedness and response core capabilities.

**Plutonium Facility:** LLNL determined that the cause of the degraded weld reported last month was the use of acid in the glovebox, despite the presence and use of a scrubber to neutralize acid fumes.

**Nuclear Facility Maintenance:** LLNL and LFO performed an assessment of nuclear facility maintenance, covering all of the elements of DOE Order 433.1B, *Maintenance Management Program for DOE Nuclear Facilities*. Overall, the team found that maintenance activities in the nuclear facilities are being performed in accordance with the requirements of the order. The team identified 3 deficiencies, 14 observations, and 4 strengths.

**Plutonium Facility:** Two criticality alarm system horns failed to operate during the semiannual surveillance test. The horns have been replaced.