

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 1, 2017

**TO:** Steven A. Stokes, Technical Director  
**FROM:** Douglas J. Brown, Cognizant Engineer  
**SUBJECT:** Sandia National Laboratories Report for August 2017

**Staff Activity at Sandia National Laboratories (SNL).** There were no onsite Defense Nuclear Facilities Safety Board (Board) staff reviews or oversight visits in August. On August 22-24, 2017, the Board's SNL cognizant engineer (COG) and three staff members attended the Nuclear Explosive Safety Orientation course (NSTE-270).

**Mixed Waste Landfill (MWL) Long-Term Monitoring & Maintenance Plan (LTMMP).** In June 2017, the Sandia Field Office (SFO) submitted the *Mixed Waste Landfill Annual Long-Term Monitoring & Maintenance Report, April 2016-March 2017, Sandia National Laboratories, New Mexico*, dated June 2017, to the New Mexico Environmental Department. This MWL Annual Report documents monitoring, inspection, maintenance, and repair activities conducted at the MWL during the April 1, 2016 through March 31, 2017 reporting period as part of SFO's long-term stewardship.

The report identified that monitoring activities were conducted in accordance with LTMMP requirements and no monitoring results exceeded LTMMP trigger levels. All monitoring results were consistent with historic MWL monitoring data. Inspections of the MWL evapotranspirative (ET) cover system, storm-water diversion structures, compliance monitoring systems, and security fence were performed in accordance with LTMMP requirements. The ET cover continues to meet successful revegetation criteria and is in excellent condition with even coverage of mature, native perennial grasses. Required maintenance and repairs were minor and were generally performed during the inspections as a best management practice. These activities included improvements to site access and drainage as well as the installation of erosion and burrow control measures at the ten perimeter monitoring well locations.

SFO reports that the LTMMP requirements have been met for this annual period. Based on monitoring, inspection, and maintenance results, the ET cover and monitoring systems are functioning as designed and site conditions remain protective of human health and the environment.

**Sandia Annular Core Research Reactor Facility (ACRRF) – Safety Basis Documentation.** On August 25, 2017, SFO issued their Safety Evaluation Report Addendum for the *Sandia Annular Core Research Reactor Facility Safety Basis 2016 Annual Update, (Change Notice 10)*. SFO concluded that the ACRRF Safety Basis 2016 Annual Update meets the annual requirement for submittal of an updated documented safety analysis as specified in Title 10, Code of Federal Regulations, Part 830, Subpart B, *Safety Basis Requirements*. The changes for this Annual Update were approved with no Conditions of Approval. A Condition of Approval for the 2015 Annual Update (administrative controls for maximum <sup>239</sup>Pu for experiments and total facility material-at-risk) must be incorporated in the 2018 Annual Update as previously approved.

**Sandia Pulsed Reactor Facility/Critical Experiments (SPRF/CX) Core Change.** Burnup Credit Critical Experiment (BUCCX) core experiments were completed. The SPRF/CX personnel changed the critical experiments core back to the Seven Percent Critical Experiments (7uPCX) core. The 7uPCX core was used to support the August criticality course.