

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 4, 2015

**TO:** Steven A. Stokes, Technical Director  
**FROM:** Zachery S. Beauvais, Cognizant Engineer  
**SUBJECT:** Sandia National Laboratories (SNL) Report for May 2015

**Nonconforming Transuranic (TRU) Waste Drums:** This month, SNL received a report from personnel at the Waste Isolation Pilot Plant (WIPP), informing them that two remote handled TRU waste drums repackaged in the Auxiliary Hot Cell Facility (AHCF) exceeded the allowable fissile gram equivalent limit for acceptance to WIPP. The drums, currently in interim storage at the AHCF, contain pieces of mixed oxide fuel rods irradiated in the Annular Core Research Reactor (ACRR) and were repackaged in 2014 as part of AHCF Campaign 12. SNL had previously concluded its planned TRU waste repackaging efforts and completed initial decontamination of the interior of the hot cell. The fissile gram equivalent measurements for the two nonconforming drums each have an error of approximately 40%. The SNL manager for Technical Area-V (TA-V) nonreactor facilities plans to have the measurement re-performed in June 2015 to verify that the drums contain excess fissile materials. If the new measurement confirms that the limit is exceeded, SNL anticipates repackaging the material into a total of six drums and will likely generate an additional drum of waste from future decontamination efforts.

**Electrical Subcontractor Work:** During the week of May 15, 2015, a subcontractor performed electrical work at the Annular Core Research Reactor Facility (ACRRF) without proper authorization. The subcontractor was hired to replace an electrical breaker in the ACRRF motor control center. SNL Facilities Management and Operations Center (FMOC), an organization outside TA-V that is responsible for utility and balance of plant maintenance, coordinated the subcontractor's work; however, TA-V management retained the right to authorize the work before it began. ACRRF personnel discovered a subcontractor electrician beginning his activities before TA-V management had authorized the activity. TA-V experienced additional problems with the subcontractor including inappropriately propping a fire door open. SNL determined that FMOC did not sufficiently communicate to the subcontractor the expectations for maintenance performed in a nuclear facility. The SNL Designated Representative has placed the subcontractor on probation for this issue and four additional performance issues elsewhere at SNL.

**Emergency Drill:** On May 20, 2015, SNL conducted an emergency drill simulating a chemical irritant released from a dropped container at the Building 957 loading dock, a non-nuclear facility. The drill scenario simulated four individuals receiving injuries requiring them to receive medical treatment at a local hospital. For this reason, the scenario was classified as an operational emergency. NNSA Sandia Field Office personnel who participated in the drill reported that there were minor communication issues, but the drill was generally successful. SNL is planning to conduct its annual emergency exercise in July 2015.

**SNL Management Changes:** This month SNL director, Dr. Paul Hommert, announced he intends to retire during Summer 2015. Dr. Hommert has been the director of SNL and President of Sandia Corporation, a wholly owned subsidiary of Lockheed Martin, since 2010. SNL has not yet named a successor. Additionally, DOE announced that they will compete the management and operating contract for SNL. Lockheed Martin's official contract to operate SNL ended in 2013 and has been extended multiple times. It is currently set to expire on April 30, 2016. DOE indicated they will extend the contract one year until April 30, 2017.