

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 1, 2018

TO: Christopher J. Roscetti, Technical Director
FROM: Dibesh Shrestha (acting), Resident Inspector
SUBJECT: Oak Ridge Activity Report for Week Ending November 2, 2018

Building 9215: Consolidated Nuclear Security, LLC (CNS) personnel conducted a walkdown of the O-Wing area on October 24, 2018, and discovered used ventilation filters that were stacked and not bagged properly outside of a fissile storage area. CNS personnel conservatively treated the filters as fissile materials and called a back-off because the location of where the filter came from was unknown at the time. CNS personnel established a Nuclear Criticality Safety (NCS) 15-foot administrative control boundary and contacted NCS personnel. Subsequently, the operators bagged and stored the filters per approved guidance. The operators later identified that these filters were inlet roughing filters from the O-Wing area gantry enclosure. CNS personnel convened a fact finding meeting on October 29, 2018, during which multiple deficiencies were identified. The planner/supervisor initiated the filter replacement work as dispatched work per the List of Pre-Approved Dispatched Work (LPDW) document. However, the LPDW document contains exclusions for facility modifications; the filter replacement work was initiated as a change request because the existing filters were no longer available and a different type of filter was needed. Additionally, the planner/supervisor did not notify NCS personnel prior to working in areas with fissile material as stated in the LPDW document. CNS is currently identifying corrective actions.

Highly Enriched Uranium Materials Facility (HEUMF): The NNSA Production Office transmitted a Safety Evaluation Report (SER) to CNS documenting the review and basis of approval of three Document Change Notices (DCNs) to the HEUMF safety basis documents. The SER concludes that the DCN submittals are acceptable because there is no increase in risk. The SER includes one condition of approval: Limiting Condition for Operation (LCO) 3.6, *Container Management*, and LCO 4.6, *Surveillance Requirements*, must be retained and may not be removed by the Criticality Control Review (CCR) process. The LCO/surveillance requirements support the safety class functions for rackable can storage boxes (RCSB), racks, and drum tray skids, and must remain effective in the Technical Safety Requirements (TSR) for non-NCS requirements.

Changes to the safety basis documents include the following: The surveillance for the diesel fuel quality test of the Safety Significant Power Distribution (PDSS) diesel generator was removed and added to the Fire Protection Safety Management Program as a programmatic requirement. The fuel quality test will include testing of newly procured fuel as well as existing fuel in the PDSS diesel generator storage tank according to the requirements of National Fire Protection Association 110, *Standard for Emergency and Standby Power Systems*. Nonconformances in the test results will be evaluated to determine operability and the need to enter the appropriate LCO. Application of the revised CCR criteria reduced the number of criticality controls elevated to the TSR. These downgraded controls will remain as programmatic requirements and continue to be implemented as part of the Criticality Safety Evaluations. Additionally, a control parameter for RCSB composition was elevated to the TSR as a safety significant passive design feature using the revised CCR criteria.