

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Steven Stokes, Technical Director  
FROM: William Linzau and Rory Rauch, Site Representatives  
SUBJECT: Oak Ridge Activity Report for Week Ending October 23, 2015

Staff members D. Brown, T. Hunt, and D. Shrestha and outside expert D. Boyd were at ORNL to conduct a review of conduct of operations and maintenance at the Transuranic Waste Processing Center (TWPC).

**Highly Enriched Uranium Materials Facility (HEUMF):** Last week, NPO asked CNS to revise the Justification for Continued Operations (JCO) submitted to address an Unreview Safety Question (USQ) associated with the surveillance of the facility's smoke detectors (see 8/28/15 report). NPO's technical evaluation of the JCO notes several concerns including that the compensatory measures do not directly address the reduced surety of a credited safety instrument to detect, alarm, and initiate actions to prevent or mitigate a fire event. NPO points out that an appropriate compensatory measure would provide another means to detect smoke and initiate credited safety functions, such as the radiological material confinement function provided by HEUMF's secondary confinement system.

**Building 9212:** CNS completed a readiness assessment (RA) for activities associated with packaging and shipping materials that have been shut down since a shipping event last July. The RA team had three findings including a concern that the software used to track quantities and movement of material was modified but the USQ determination process was not applied prior to making the change. To address this concern, CNS personnel submitted documentation that indicated that the software modification was not applicable to the USQ process. The RA team questioned that determination as it appeared to them that tracking the location and the amount of material could have safety basis implications and should be reviewed using the USQ process. Although the RA team had findings, they noted that the operators and supervisors were proficient and displayed good conduct of operations during the RA demonstrations.

**Technical Procedures:** This week, CNS held a fact-finding meeting to discuss issues with the verification and approval of a Building 9204-2E packaging procedure. In late August 2015, while preparing a package of revised procedures for the NNSA Office of Packaging and Transportation, CNS Packaging and Transportation Engineering (PTE) personnel found that a packaging procedure had been revised two months earlier without being routed to PTE for approval. Upon subsequent review of the procedure in question, PTE identified a discrepancy in which the procedure contained a closure bolt torque tolerance that was greater than the tolerance specified for one specific onsite storage container by approximately 5 percent. This error had been present through multiple revisions of the procedure dating back several years. The fact-finding also identified an issue in which responsible engineers elected to keep the procedure in question active and available for use for approximately one month after this discrepancy was identified. CNS is still finalizing the corrective actions from the issue, but the corrective actions identified to date include providing a refresher briefing to various engineering groups on the process for procedure review and approval.

**TWPC:** The new TWPC prime contractor, North Wind Solutions, LLC, started a 45-day transition period to replace Wastren Advantage, Inc. (WAI). The original WAI contract ended in January, 2015, but DOE extended the contract to allow for contractor award and resolution of the subsequent protests.