

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Timothy Dwyer, Technical Director  
FROM: William Linzau and Rory Rauch, Site Representatives  
SUBJECT: Oak Ridge Activity Report for Week Ending January 11, 2013

**Contract Transition:** NNSA selected Consolidated Nuclear Security, LLC (CNS) as the management and operating (M&O) contractor for the Y-12 National Security Complex and the Pantex Plant. The CNS team comprises Bechtel National, Inc.; Lockheed Martin Services, Inc.; ATK Launch Systems; and SOC, LLC. The four-month transition immediately started after the announcement and CNS will take over mission activities May 1, 2013. NNSA identified four objectives for this contract: 1) improving mission performance, 2) merging operations at geographically separated centers of excellence under a single contract; 3) reducing the cost of performing work; and 4) supporting an integrated DOE/NNSA enterprise. In the announcement, the NNSA Administrator stated “this contract puts NNSA in a position to improve mission delivery by generating significant savings that will be reinvested to improve safety, security, quality, and infrastructure.”

**Fire Protection/Building 9212 Operations:** NPO recently issued a Safety Evaluation Report (SER) approving an annual update to the Safety Analysis Report for the Building 9212 complex. The SER contained no new conditions of approval (COA); however, one legacy COA remains open. This COA requires B&W to pursue the installation of wireless pressure monitoring devices on the risers of the four safety-class fire sprinkler systems in Building 9212 such that continuous remote pressure indication is available (see 3/27/09 report). B&W has made significant progress in addressing this COA in recent months. Maintenance and fire department personnel have completed the installation of electrical tie-ins and pressure transmitters for two of the systems. B&W plans to have this capability fully installed and ready for use by April 2013. Initially, B&W does not plan to incorporate this system into the technical safety requirements, but its incorporation may be revisited after some baseline operational data has been obtained.

**Conduct of Operations/Criticality Safety:** B&W procedures require mock-up assemblies within a material access area to meet the same criticality safety controls and requirements as their enriched uranium counterparts unless a nuclear criticality safety-approved exception has been received. This week, operators in Building 9204-2E violated this requirement by failing to stage a mock-up assembly overnight in an approved fissile material array. Production personnel immediately verified that all other mock-up and enriched uranium assemblies had been staged per nuclear criticality safety program procedures. Subsequently, Building 9204-2E supervisors provided a refresher briefing to all operators working in the facility on the subject requirement. B&W performed an initial fact-finding review of the event and identified several opportunities to improve the response to the discovery of this condition. Building 9204-2E management plans to conduct a series of unannounced drills in the coming months to improve the worker and supervisor response to the discovery an abnormal condition involving fissile material.

**Special Processing Operations:** B&W has slightly modified certain operations in the special processing area of Building 9212 and Building 9202 (Development) in order to support an NNSA Global Threat Reduction initiative. The purpose of this campaign is to produce a highly sinterable low-enriched uranium oxide that will ultimately be used to convert the core of a small research reactor in the Caribbean from highly enriched to low-enriched uranium. This week, the site reps observed a contractor readiness assessment (RA) of these operations. The RA team identified one weakness involving an inconsistency between the valve alignment checklist and one of the procedures for an operation in Building 9212. The RA team recommended that the B&W Vice President for Production approve startup of these operations.