

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 July 25, 2014

Board members Peter Winokur, Jessie Roberson, and Sean Sullivan and staff members Steven Stokes, Robert Oberreuter, Dermot Winters, and Rick Reback visited Oak Ridge this week.

Board Visit to Oak Ridge. NPO, OREM and contractor personnel briefed the Board members and staff on the status of operations, key safety initiatives, and ongoing design efforts at Y-12 and ORNL. The Board members and staff walked down Building 9212, Building 9204-2E, and Building 9204-2 at Y-12, and ORNL's Transuranic Waste Processing Center (TWPC) and Building 2026. Noteworthy items from the visit include the following:

- CNS managers provided a set of ongoing and planned actions to build upon several key safety initiatives already undertaken by B&W. Examples include initiatives to improve conduct of operations and work planning and control performance, as well as efforts to improve the site's capability to respond to severe events.
- CNS managers discussed the most significant age-related conditions and associated risks in Buildings 9212, 9215, and 9204-2E. Many of these issues have been described in recent site rep weekly reports (see 7/4/14 and 5/30/14 reports).
- CNS managers presented key components of a draft Enriched Uranium (EU) Infrastructure Strategy (see 2/14/14 report). The site reps have previously reported the key initiatives that are planned to support transition of EU operations from Building 9212 (see 2/21/14). With respect to Buildings 9215 and 9204-2E, CNS managers noted that significant investments will be required to sustain safe operations for the remaining operational lifetime of each facility. Currently, CNS estimates that Buildings 9215 and 9204-2E will have to continue EU operations until the late 2030s and beyond 2040, respectively. The EU Infrastructure Strategy will be finalized when the newly appointed Uranium Program Manager (UPM) provides input and concurrence. The UPM was at Y-12 this week and attended the aging infrastructure-related briefings to the Board.
- To alleviate storage space limitations created by the inability to commence shipments of transuranic (TRU) waste to the Waste Isolation Pilot Plant, Wastren Advantage, Inc. (WAI) has begun to ship drums of contact-handled TRU waste from TWPC back to ORNL waste storage facilities. WAI has shipped 175 of these drums to date. WAI is also making plans for additional storage capacity for remote-handled TRU waste.
- Isotek Systems, LLC, plans to use the hot cells in ORNL's Building 2026 to conduct downblending activities for some of the U-233 stored in Building 3019. Building 2026 is operated by UT-Battelle, but the facility is being prepared for turnover to Isotek in calendar year 2016, assuming funding is available.

Oak Ridge Office of Environmental Management (OREM): Last week, OREM approved the Evaluation of the Safety of the Situation (ESS) that was prepared by UCOR to address the Potential Inadequacy of the Safety Analysis (PISA) related to a recently identified detonation hazard in certain waste drums (see 5/16/14 report). The ESS identifies interim safety measures implemented through a standing order that prohibits contact, movement, or handling of the specific containers stored at the Melton Valley Solid Waste Storage Facilities. As part of its basis for approval, OREM also considered the fact that the affected containers have a long history of safe storage. OREM requested that UCOR submit a Justification for Continued Operation by July 31, 2014.