DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Steven Stokes, Acting Technical DirectorFROM: William Linzau and Rory Rauch, Site RepresentativesSUBJECT: Oak Ridge Activity Report for Week Ending May 17, 2013

Building 9204-2E/Conduct of Operations: This week, a process engineer confirmed that a tool used during assembly operations in Building 9204-2E had a different identification number than the tool listed in the procedure. The tool, a stainless-steel ring used as a heat sink during welding operations, has an identified safety function in the Building 9204-2E Safety Analysis Report, but is not a Technical Safety Requirement-level control. Earlier this year, the original tool had been replaced with the tool currently in use, but the procedure was not updated to indicate the new tool identification number. When the replacement tool was put into service, operators questioned the discrepancy with the numbers, but an engineer incorrectly endorsed proceeding based on a note at the front of the procedure that allowed the use of generic tools (mallets, screwdrivers, etc...) not specifically listed in the procedure. B&W management is taking corrective actions including revising the procedure and stressing the importance of procedural compliance.

Work Planning and Control (WP&C): The Vice President for Facilities, Infrastructure, and Services (FI&S) has initiated several additional actions as part of the General Manager's key initiative to improve WP&C performance at Y-12. One improvement action involves an effort to increase subject matter expert (SME) participation in the identification of hazards and development of controls for FI&S jobs. FI&S personnel piloted different approaches to this effort in select facilities during the last several months (see 1/18/13 and 2/1/13 reports). Based on lessons learned from these pilot efforts, FI&S management recently selected the approach that they believe best addresses identified WP&C performance issues. This week, they issued a charter formalizing the approach, termed an "SME Work Package Review." This review requires planners to convene all applicable SMEs after the work package for a job has already been developed to ensure that the work package adequately captures all required hazard controls. Designated "SME Observers" are required to attend the review to mentor the participants and improve work package quality prior to field execution. Planners and supervisors jointly determine the need for this review based on the complexity and uniqueness of the job.

This week, the site rep attended an SME Work Package Review for replacing a pump in Building 9215. Even though it appears that a relatively simple job was selected for review, the SMEs did provide comments that resulted in improvements to the work package.

Building 9204-2: B&W completed an analysis of the causes of the event in which a worker was injured when exposed to lithium hydride powder (see 4/5/13 report). The analysis established the following primary causes: the equipment was stopped prior to completing a normal cycle and the hazards associated with this abnormal condition were not recognized; the engineer provided direction to the operator without involving the supervisor; the hazard analysis did not identify the potential hazard associated with this abnormal condition; and the procedure was not appropriate for the post-work test and did not implement sufficient controls. B&W management has identified corrective actions for the causes and issues from an extent-of-condition review.

Unreviewed Safety Question (USQ) Process: Last week, NPO approved a revision to the B&W procedure for addressing USQs. The primary intent of the revision was to establish an expectation for the time frame within which B&W should submit a justification for continued operations following a positive USQ determination (see 12/21/12 report). The time frame is 30 days, which is consistent with DOE guidance on the implementation of the USQ process.