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 18, 2013

Work Planning and Control: The latest contractor assurance system performance report identified the need to improve work planning and control performance as a key initiative (see 12/7/12 report). This week, as part of the site's continuing effort to improve this area, the B&W Vice President for Facilities, Infrastructure, and Services (FI&S) issued an action plan identifying new requirements for subject matter expert (SME) participation in the development of hazard controls. For complex and hazardous jobs, SMEs (e.g., radiological control, industrial hygiene) are now required to participate in roundtable reviews with FI&S personnel during the development of job hazard analyses and near the end of the preparation of the work package. These roundtable reviews are intended to foster a more team-based approach to work planning and control and increase assurance that 1) the proper set of hazards and controls are identified, 2) conflicts between hazard controls are efficiently identified and resolved, and 3) controls are properly flowed into work instructions. FI&S management piloted these roundtable reviews for select jobs in Building 9212 this week. Next week, nuclear safety operations personnel plan to initiate an independent assessment of work planning and control to gauge the effectiveness of the actions taken to date to improve performance in this area.

Quality Control: The Building 9212 operations manager entered Limiting Conditions for Operation (LCO) for two fire sprinkler systems after quality engineers identified concerns with some of the sprinkler heads installed on these systems. B&W had stored replacement sprinkler heads in a controlled storage location that was not verified to meet quality requirements; therefore, the sprinkler heads were considered non-conforming. The caged and locked storage area was posted with a sign to inform personnel to contact the quality organization prior to using the components stored within, but the individual items were not tagged as non-conforming. B&W is determining whether the sprinkler heads need to be replaced. B&W is also taking steps to eliminate the non-compliant storage condition.

Criticality Safety: B&W has identified approximately 30 glass flasks that had been accepted for use in Building 9212 but did not meet the dimensions specified in the drawings referenced by the applicable criticality safety requirements (CSRs). The drawings specify the dimensions required to ensure that the geometries of these passive design features remain bounded by applicable criticality safety evaluations. The measured dimensions of these 4-liter flasks were out-of-specification by 0.1 to 0.25 in. B&W has taken the flasks out-of-service, labeled them as non-conforming, and initiated efforts to re-analyze the CSRs, which should allow the dimensional tolerances of the flasks to be relaxed. This issue was identified during an extent-of-condition review that was initiated after quality assurance personnel identified newly procured flasks that did not conform to drawing dimensions. All of the non-conforming flasks identified to date were accepted through legacy quality acceptance processes; therefore, the next phase of B&W's extent-of-condition review will likely sample other passive design features for nuclear criticality safety that were accepted through these processes.