

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Timothy Dwyer, Technical Director  
FROM: Wayne Andrews and David Kupferer, Site Representatives  
SUBJECT: Oak Ridge Activity Report for Week Ending December 17, 2010

Y-12 and ORNL were closed on Monday and Thursday due to snow and ice.

**ORNL Tank W-1A.** Staff members Farid Bamdad, Zack Beauvais, Dan Burnfield, and Rebecca Raabe visited ORNL to review the Tank W-1A project (see the 12/31/09, 5/21/10, 7/30/10 and 11/5/10 reports). In particular, the staff participated in a walkdown of the work site and discussed both the Documented Safety Analysis (DSA) and the Radiological Protection Program with key personnel representing DOE-ORO and Bechtel Jacobs Company (BJC). The staff identified weaknesses in the calculations that support the DSA calculations and the As Low As Reasonably Achievable (ALARA) analysis. BJC is currently scheduled to initiate its contractor Operational Readiness Review (ORR) on February 7<sup>th</sup>. Based on discussions during the staff's review, it appears likely that the ORR will be postponed. The Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation (TDEC) have agreed to this anticipated delay in schedule.

**Manufacturing Management/Equipment Inspection and Calibration.** B&W briefed the site representatives on the status of its Manufacturing Operations Management Modernization project last week (see the 5/28/10 report). B&W has divided the project into two phases; the first phase of the project includes replacing production planning software whereas the second phase of the project includes replacing most of the other software and hardware systems that support nuclear operations at Y-12 (e.g., software used to track and verify operator qualification, material inventories, equipment calibration, etc.). In July, B&W submitted its Critical Decision-2A/3A (CD-2A/3A) package, which addresses the first phase of the project, to NNSA for approval. This summer, B&W plans to begin demonstrating the new software to Y-12 personnel. B&W is planning to submit its CD-2B/3B package, which addresses the second phase of the project, to NNSA in 2012 and is scheduled to complete the project in 2014.

**Storage Operations/Material Disposition.** This week, the site representatives conducted a walkdown of Buildings 9720-12 and 9720-18, which are primarily being used to store depleted uranium. B&W is planning to transfer most of the containers and drums stored in Buildings 9720-12 and 9720-18 to Building 9720-5 (previously referred to as the Warehouse, see the 4/9/10, 4/30/10, 5/14/10, 10/29/10, and 11/26/10 reports).

Last week, YSO transmitted comments to B&W from its review of the Safety Analysis Report that B&W revised to support transitioning some nuclear material storage operations to Building 9720-5. YSO's comments include the following: (a) the Material at Risk inventory should be based on realistic plans rather than on the maximum quantity of material that could be stored in the storage areas/volumes and (b) an appropriate control should be considered as part of the Technical Safety Requirements to support the aforementioned Material at Risk inventory assumption. B&W is developing its response to YSO's comments. During the next two weeks, B&W is planning to provide the Board's staff with its basis for determining that Building 9720-5 is the most appropriate, feasible option for storing the nuclear material discussed above.