

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Timothy Dwyer, Technical Director
FROM: Rory Rauch, Site Representative
SUBJECT: Oak Ridge Activity Report for Week Ending October 5, 2012

The Board conducted a public hearing in Knoxville this week to discuss the factors that could affect the timely execution and safety of the Uranium Processing Facility Project. Board members P. Winokur, J. Roberson, J. Bader, J. Mansfield, and S. Sullivan received testimony from senior NNSA and B&W management.

Work Planning and Control: Last week, during execution of a maintenance work package to remove an exhaust fan from the roof of Building 9204-2E, a radiological control technician (RCT) discovered that maintenance personnel had been performing work outside the scope of the activity that the RCT had evaluated for radiological hazards. Specifically, the RCT was not aware that the maintenance crew was going to be exposed to the inside of the ductwork attached to the fan and expressed concern that the inside of the ductwork may be contaminated. The RCT subsequently surveyed the inside of the ductwork and found no radiological contamination; however, the critique for the event revealed the following weaknesses in work planning and control for this activity:

- The maintenance planner did not provide a sufficiently detailed description of the scope of work in the first radiological work permit (RWP) request he submitted for the job (this RWP request applied to the hoisting and rigging portion of the job). The description of the scope of work did not indicate that the workers would be exposed to the inside of the ductwork. As a result, the RCT inappropriately concluded that neither an RWP nor a hold point was required for the work described in this RWP request.
- The maintenance planner did not request the RCT's participation in the job walkdown. The RCT later attended the job site when he surveyed the outside of the exhaust fan in support of the first RWP request, but never sought clarification regarding the scope of work for the job.
- The maintenance supervisor initiated work before the RCT processed the second RWP request for the job (this request applied to the exhaust fan lockout/tagout and ductwork removal). The planner submitted the RWP request, but the RCT inadvertently overlooked its submittal. The results of RWP requests are typically not documented in a work package unless an RWP is required. Therefore, the supervisor assumed that no RWP was needed when he authorized the start of work for this portion of the job.
- The maintenance crew cut the ductwork to downsize it in preparation for packaging. This action was outside the scope of work defined in the work package for the job.

Maintenance management is developing several corrective actions to address these weaknesses. One of the most significant actions involves an evaluation of the adequacy of maintenance work planning walkdowns and the work package approval process to strengthen the communication between maintenance planners and those who provide safety-related input for the activity.

Extent-of-Condition Review: Last week, the NPO manager issued a letter to the B&W General Manager clarifying NPO's expectations for the extent-of-condition review that B&W initiated following the August 2012 security standdown (see 8/31/12 report). The letter requests that B&W place additional emphasis in its extent-of-condition review on evaluating its practices and procedures for planning and executing nuclear work. The letter indicates that B&W should evaluate the formality of communication for interpreting work instructions and plans, and the state of expectations and performance for pausing operations under unexpected conditions or when procedures are unclear. The NPO manager requested a report of the results of this review by November 12, 2012.