

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 May 25, 2012

Staff member Rory Rauch was in Oak Ridge this week to augment site representative coverage.

Emergency Management. Staff members T. Chapman, J. Deplitch, M. Helfrich, C. Johnson, and B. Sharpless visited Oak Ridge to review emergency preparedness including the following topics: (a) accidents, consequences, and barriers identified in Emergency Planning Hazard Assessments and (b) integration of site-specific emergency management programs (i.e., Y-12 and ORNL) for responding to reservation-wide emergencies and beyond design basis events.

Work Planning and Execution/Conduct of Operations. YSO previously committed to both NNSA Headquarters (see the 9/30/11 report) and the Board (in response to Board letters dated 8/25/11 and 12/29/11) that it would coordinate an independent assessment of both conduct of operations and work planning and execution. This assessment was performed this week by personnel representing NNSA Headquarters and Sandia National Laboratory. During its out-brief, the assessment team highlighted several actions B&W has taken to improve both conduct of operations and work planning and execution (see the 10/28/11 and 11/18/11 reports). The team also made several noteworthy recommendations including (a) improve communications during procedure execution, (b) procedurally capture operator actions that are taken based on process knowledge, (c) expedite procedure upgrades (see the 2/24/12 report), and (d) enhance the rigor associated with processes for revising work packages.

Last week, B&W issued the report for its independent assessment of work planning and control processes (see the 11/18/11 and 3/23/12 reports). The assessment team highlighted the following improvements made by B&W during the past few months: (a) clear identification of work scope and job-specific hazards and controls in work packages, (b) enhanced oversight using a Maintenance Manager Watch, and (c) use of oral examination boards for qualification of maintenance supervisors. The team noted that additional management attention in the following areas is warranted: (a) continued overreliance on supervisors and workers to identify work planning deficiencies, (b) recurring deficiencies in appropriate utilization of stop/suspend work authority, and (c) recurring execution issues associated with lockout/tagout (LO/TO) processes.

During the past few years there have been recurring issues associated with B&W's execution of its LO/TO processes (see the 10/31/08, 1/16/09, 12/24/10, and 4/20/12 reports). More recently, on April 25th, a subcontractor cut through a live 130V circuit during demolition activities in a pump house adjacent to Building 9204-4. On May 8th, a B&W electrician cut through a live 240V circuit during activities to relocate an oven in the Technology Development Building. Both of these events were externally reported by B&W. Two weeks ago, the President of B&W suspended all work associated with LO/TO of electrical circuits. Some limited electrical LO/TO activities (e.g., preventive maintenance of safety systems) have subsequently been granted work authorization based on identification of compensatory measures (e.g., additional walkdowns of the work site, reviews of the work package, and oversight of work execution). Also in response to these events, B&W Y-12 coordinated a B&W Corporate review of its LO/TO program. The Corporate review team completed its review this week and recommended the following actions be taken: (a) include mechanical LO/TO activities within the scope of the work suspension, (b) form a Senior Review Board to review LO/TO packages, and (c) perform a causal factors analysis of recent LO/TO events that is facilitated by B&W Pantex personnel. This week, YSO informed B&W that a lack of corrective actions to resolve LO/TO issues (see the 2/3/12 report) is significantly impacting YSO's confidence in B&W's Contractor Assurance System.