

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 April 27, 2012

Y-12 Emergency Management. The Board's staff—T. Cutler and T. Chapman—and site representatives observed a full-scale emergency management exercise that simulated a spill of acetonitrile (ACN) in the Purification Facility while in the normal operating mode (see the 6/18/10 report). The Purification Facility is a non-nuclear facility that contains various chemical hazards. The exercise scenario simulated the hose which was transferring the ACN suddenly breaking loose from the 55-gallon drum and spilling approximately eight gallons of ACN into the process area. The chemical operator simulated releasing the “dead man switch” and hitting the SCRAM button while evacuating the facility. The Board's staff and site representatives observed activities at the Incident Command post and the Technical Support Center. It appeared that the vast majority of the objectives were met and there were no major shortfalls observed by the evaluators. B&W expects to issue a report within thirty days of the exercise.

B53 Dismantlement Operations. Last week, B&W successfully initiated first-use of the Wachs cutter and a new walk-in hood during B53 dismantlement operations (see the 12/3/10 report). Although B&W performed its Readiness Assessment for startup of B53 dismantlement operations more than 20 months ago (see the 8/13/10 report), B&W determined that an independent B&W Readiness Assessment (in addition to the comprehensive line-management review that was performed) prior to first-use of the Wachs cutter and the new walk-in hood was not required. The basis for this determination was that (a) the walk-in hood was additional capacity to existing capabilities regularly used in Building 9204-2E and (b) the Wachs cutter was a minor aspect of the overall B53 dismantlement process (i.e., operation of the Wachs cutter is not in and of itself a “task”; B53 dismantlement operations is the task). The site representatives note that this new phase of B53 dismantlement operations did not require any new safety basis controls and B&W performed supervisory oversight of initial operations consistent with its startup plan.

Safety Analyses/Specific Administrative Controls (SACs). In February, while conducting an Implementation Validation Review (IVR) for the most recent annual update of the Building 9204-2E Documented Safety Analysis (DSA), the B&W IVR team identified four programmatic administrative controls that should have been identified in the DSA and Technical Safety Requirements (TSRs) as SACs (see the 10/23/09 report). Specifically, each of the four controls was identified in the Hazard Evaluation Studies and Accident Analysis as SACs, but the DSA and TSRs identified the subject controls as programmatic administrative controls. B&W appropriately addressed this issue by (a) declaring a PISA, (2) determining that this issue resulted in a positive Unreviewed Safety Question, and (3) developing and submitting a Justification for Continued Operations (JCO) to YSO for approval. B&W also identified a corrective action to conduct an extent-of-condition review of sitewide DSA and TSRs by July of this year to identify similar issues. Two weeks ago, YSO informed B&W that since no safety basis changes are involved, YSO approval of the JCO is deemed unnecessary. In this rejection of the JCO, YSO also stated that it understands that the annual update of the TSRs will include formatting the controls as SACs.