

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 17, 2009

TO: Timothy Dwyer, Technical Director
FROM: Donald Owen and David Kupferer, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending July 17, 2009

Board Member Visit. Board member Larry Brown and staff member John Abrefah visited Y-12 to review various operational and safety management issues and walk-down Building 9212. Some noteworthy items from the visit include:

- **Quality Assurance (QA)** — B&W management discussed efforts on their execution-focused Conduct of Quality Program being implemented to address the need for site-wide improvement in QA (see the 4/3/09 site rep. report). B&W is finalizing two reports. One report is on HEUMF Project Conduct of Quality Lessons Learned and a separate report is on the Conduct of Quality Program initial assessment of QA at Y-12 nuclear facilities. B&W management has decided to establish a new Nuclear Facilities Quality Management organization, which will report to the B&W Y-12 President. This organization change will separate nuclear facilities QA from weapon component QA.
- **Building 9212** — As part of the B&W's Continued Safe Operating Oversight Team yearly assessment of the risks of operating Building 9212 (see the 4/3/09 and referenced site rep. reports), a detailed inspection of steam system equipment is planned by early September.

Secondary Extraction Operations/Implementation Validation Reviews (IVRs). In March 2006, YSO approved a Justification for Continued Operations (JCO) that included several compensatory controls associated with heavy organic materials potentially preventing the phase separators from performing their safety function (see the 4/4/08 site rep. report). In November 2006, YSO approved a revision to that JCO, which included a new requirement that defined the measurement accuracy (0.05 gram/ml) to be used in calculating the specific gravity of the organic solution. B&W has been assuming a smaller, more exact measurement accuracy value while conducting these calculations. Last week, facility operations management discovered this discrepancy and B&W externally reported a Technical Safety Requirement (TSR) violation. B&W intends to revise the JCO based on a previously developed technical basis that the measurement accuracy is approximately 20 times smaller than the 0.05 gram/ml requirement.

The site reps. note that B&W performed an IVR in 2006 to validate initial JCO implementation. However, B&W did not perform an IVR subsequent to revising the JCO later that year. This is the second safety basis violation B&W has declared this year as a result of failing to identify a change to the safety basis and consequently, not performing an IVR to validate implementation of the change. The first instance involved a change to the combustible control requirements for Building 9206 (see the 2/20/09 site rep. report). Not performing IVRs for such changes would not be consistent with a draft DOE Guide on IVRs issued by NNSA line management to the field in March, which calls for IVRs to be performed (on a graded approach) even for changes to a single acceptance criteria for safety-significant items.

Senior Management Team (SMT) Meeting. The SMT—including representatives from the production plants and national laboratories—met this week at Y-12. The SMT discussed the status of the following activities: the ongoing component reuse study, the W76-1 code blue, startup of B53 and W84 operations at Pantex, and a planned surveillance requirements study.

Infrared Debonding. This week, B&W initiated its contractor Readiness Assessment of infrared debonding operations, initially to be used during disassembly of W70 components.