

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Steven Stokes, Acting Technical Director  
FROM: William Linzau and Rory Rauch, Site Representatives  
SUBJECT: Oak Ridge Activity Report for Week Ending August 2, 2013

**Building 9212 Operations:** Operations in Building 9212 were hampered this week due to several equipment condition problems. Leaks in the process condensate storage system restricted the use of the high capacity evaporator and other interdependent chemical recovery processes. In its May 2011 report, the Facility Risk Review (FRR) follow-on evaluation team recommended replacement of the process condensate storage system because its degraded condition presented increased industrial, radiological, and criticality safety risks. More recently, the Continued Safe Operability Oversight Team (CSOOT) indicated that activities to replace this system have not been fully funded in recent years (see 7/20/12 report). Program management has indicated that plans are now being completed to replace the system by the end of FY14. These plans include relocating the system from the basement of 9212 to the main process floor.

The Oxide Conversion Facility resumed operations this week for the first time since production personnel encountered problems with the safety-significant programmable logic controller in early May (see 5/31/13 and 7/5/13 reports). Last week, a hydrogen monitor had to be replaced and earlier this week a ventilation flow gauge in the reduction fluid bed required repair before the system could be started.

Electricians addressed the ground fault issue that prevented reduction operations from resuming two weeks ago (see 7/19/13 report); however, resumption of reduction operations was further delayed due to an inability to draw sufficient vacuum on the reactor vessels after they were prepared and loaded in the furnace. Additionally, repair work was required on the denitrator to correct anomalous noises heard during operation. Crafts personnel discovered that a bolt was missing, which allowed the denitrator housing to shift out of alignment, resulting in a damaged gear. Crafts personnel have replaced the gear.

In March, the CSOOT reported on the negative trend in the availability of Building 9212 process systems (see 3/29/13 report). B&W management, in order to better position the site to address emerging equipment issues, recently created a key initiative to improve maintenance program effectiveness by using integrated scheduling processes. The initiative is a site-wide effort involving the Production, Programs, Projects, and Facilities, Infrastructure, and Services organizations. These organizations have contributed to form a core planning team working to create an FY14 integrated schedule. One of the strategies being utilized as part of the initiative is the scheduling of planned production outages to facilitate coordinated maintenance periods.

**Fire Protection:** NFPA standards require sprinkler heads that have been in service for 50 years to be replaced or submitted for testing to ensure continued functionality (see 3/16/12 and 8/3/12 reports). The sprinkler heads for the safety-significant wet pipe fire suppression systems in Building 9720-5 will reach this 50 year service life threshold in December 2013. B&W has replaced approximately half of the sprinkler heads in the facility and plans to complete all sprinkler head replacement activities by the end of the fiscal year. The next credited fire suppression system scheduled to have its sprinkler heads replaced is located in Building 9215. This activity is currently scheduled for FY15.