

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 1, 2007

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending June 1, 2007

A. Building 9212 Documented Safety Analysis. BWXT has been working on implementation of the Building 9212 Documented Safety Analysis (DSA) since obtaining YSO approval in July 2006. Although DSA implementation was originally scheduled for January, BWXT requested the schedule be extended to July 2007 (see the 11/24/06 site rep. report). In early May, BWXT completed a Management Self-Assessment (MSA) to evaluate implementation in advance of the independent Implementation Validation Review (IVR), which is currently scheduled to begin next week. The MSA team identified numerous findings based on a sampling (approximately 25%) of facility implementation procedures. For some areas, DSA implementation was not complete and could not be reviewed by the MSA team. As of this report, BWXT management plans to make a decision on Monday on whether to proceed with the BWXT IVR. The YSO IVR schedule is under review but may be concurrent with the BWXT IVR.

B. Wet Chemistry Operations. As previously reported, equipment and safety basis issues over the last few years have limited wet chemistry operations since restart in 2003 (see the 9/22/06 and 2/17/06 site rep. reports). As wet chemistry provides a path for processing uranium solutions, these issues continue to result in a significant backlog of solutions stored in tanks and safe bottles. Additional solution storage space will be needed or an impact on other site activities may occur in the near future.

C. Warehouse Characterization Activity. BWXT has completed the first of two phases of the effort to characterize legacy uranium items that may be contaminated with plutonium (see the 6/2/06 and 2/2/07 site rep. reports). The first phase involved use of a temporary glovebag and involved items that were in unsealed lockboxes. Results of the characterization activity indicated no plutonium contamination. BWXT had planned to use the glovebag to perform the second phase involving numerous items that are in about 40 sealed drums. Based on experience from a fire in September 2006 involving inspection of metal items (see the 10/6/06 and 4/6/07 site rep. reports), BWXT is now planning to use a temporary glovebox with an inert atmosphere for unpacking and separating items from any combustibles. Startup is projected in September. This week, Warehouse management presented these plans to the site-wide Management Review Board. Questions were raised on certain engineering issues including ventilation filtration.

D. Warehouse Glovebox Activity. This week, the site rep. observed startup of a shear machine that was installed in the Warehouse glovebox previously used for uranium metal drilling/sampling operations. This shear machine will be used to perform size reduction for a number of metal items to support off-site shipment as a part of the uranium blend-down program. BWXT successfully completed a Readiness Assessment for this activity in May. During the initial operation on Wednesday, however, the hydraulic ram failed mid-stroke such that operators were not able to manipulate the ram nor remove the material from the shear. Operations personnel appropriately contacted the shift manager to identify the problem and to develop actions to place the activity in a safe/stable condition. Subsequent investigation identified a loose lead on the shear controller that was corrected and allowed completion of the evolution. Additional shearing activities are on-hold pending additional BWXT investigation.