

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 10, 2007

**TO:** J. Kent Fortenberry, Technical Director  
**FROM:** R. Todd Davis/Donald Owen, Oak Ridge Site Representatives  
**SUBJECT:** Activity Report for Week Ending August 10, 2007

A. Specific Administrative Control Implementation. The Board's letter of July 30, 2007 forwarded a staff observation regarding lack of safety classification of monitoring and alarm equipment supporting a Specific Administrative Control (SAC). This SAC was to maintain glovebox oxygen level to less than 2 percent to avoid a glovebox explosion (also see the 4/6/07 site rep. report). YSO personnel had indicated to the staff that portions of the equipment would be upgraded to safety-significant. Last week, YSO issued a Safety Evaluation Report (SER) with a Condition of Approval (COA) that called for a design adequacy evaluation within four months. The SER and COA were not clear whether the equipment is or will be upgraded to safety-significant. The site rep. discussed this observation with YSO management. In response, YSO personnel stated that the SER and COA will be revised to clearly call for upgrading monitoring and alarm equipment to safety-significant.

B. Rolling and Forming Restart. The site rep. observed restart of rolling and forming operations with enriched uranium this week following completion of a Readiness Assessment (see last week's site rep. report). The site rep. notes that certain portions of the evolution such as operating the rolling mill and transferring the rolled plate are covered under general procedure steps but require various control and switch manipulations. The specific manipulations are performed using skill-of-the-craft and are not detailed in the procedure. In discussion with the site rep., BWXT management noted that the currently qualified operators have been with these operations since prior to the 2004 shutdown and have been performing numerous dry runs in the months leading up to this restart to achieve and maintain proficiency. As these operations are not performed on an on-going basis, BWXT management stated that a program to maintain proficiency and bring in new operators for rolling and forming is to be developed and implemented.

C. Feedback and Improvement. For a recent spill associated with the high capacity evaporator, BWXT identified a compensatory measure to limit storage tank volume until the cause is better understood (see the 7/13/07 and 7/20/07 site rep. reports). BWXT planned an engineering evaluation to address this issue. The site reps. inquired on specific engineering aspects to be evaluated. Based on discussions with BWXT personnel, it does not appear that such specific engineering aspects have been formally defined. Such lack of definition is also apparent for a planned engineering evaluation in response to a safe bottle pressurization event (see the 6/15/07 site rep. report). Such informal handling of intended engineering evaluations will likely not adequately address the issues. Defined engineering plans and formalization appear to be warranted. Based on site rep. discussions with YSO and BWXT management, BWXT is pursuing potential options for addressing this issue.

D. Emergency Management Exercise. On Wednesday, the site rep. observed a full-participation exercise of a simulated fire in the Assembly/Disassembly Building. Protective actions appeared to be generally appropriate though numerous individuals were sent to an assembly station that was not upwind of the fire (though not in the plume). Analysis of the exercise continues.