

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy Dwyer, Technical Director
FROM: Matthew Duncan and Rory Rauch, Pantex Site Representatives
SUBJECT: Pantex Plant Report for Week Ending November 25, 2011

Procedure Configuration Management: Last week, technicians stopped a nuclear explosive operation after realizing that they had been using the wrong procedure for that particular unit. The procedure they should have used governs disassembly and inspection operations, but the technicians instead used the procedure that directs disassembly to support a life extension program (DISLEP). The two procedures are very similar—the only difference being the DISLEP procedure instructs the technicians to cut a component. It was this step that caused the technicians to question the procedure and ultimately led to the discovery of this issue. Use of the wrong procedure on this unit did not have any direct safety implications.

This event has exposed a weakness in B&W's process for maintaining configuration management of procedures while a unit is in process. Currently, manufacturing personnel ensure that they have been provided the proper procedures for a given unit, but this occurs before any work has been performed. This is accomplished by the responsible supervisors comparing the hard copies of the procedures provided by document control to the procedures listed on a procedure preparation chart created by the process engineer. Both the hard copies of the procedures and the preparation chart are provided in a unit folder that is almost always located in the same facility as the unit. However, as the precursor for this event, the day shift supervisor had separated the unit folder from the unit and failed to convey this information to the grave shift supervisor during shift turnover. After the grave shift supervisor was unable to locate the unit folder, he printed a copy of the wrong procedure and provided it to the technicians. As an interim corrective measure, manufacturing management issued a standing order to establish a requirement that supervisors review the procedure preparation chart prior to authorizing work using a newly printed copy of the procedure. In the long term, engineering personnel plan to develop some means for technicians to verify the procedure preparation chart electronically (i.e., independent of the unit folder).

Tooling Modernization: B&W recently issued a revision to the tooling modernization program (TMP) plan. The goal of the TMP is to increase the margin of safety for operations at Pantex through tooling upgrades to implement the latest tooling design concepts. The latest revision of the plan reflects the effort by a cross-functional team of subject matter experts to apply weighted criteria to potential tooling upgrade projects, generate a score for each project, and rank them accordingly. The highest ranking projects involve similar safety enhancements to eliminate use of the swing arm on the W76-0 and W78 disassembly processes, the latter of which is already underway. B&W has not identified funding for most of the projects listed in the plan.