

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

**MEMO TO:** Timothy J. Dwyer, Technical Director  
**FROM:** Timothy Hunt and Rory Rauch, Pantex Site Representatives  
**DATE:** 22 August 2008  
**SUBJECT:** Pantex Plant Weekly Report

**B53 SS-21 Development:** The scope of B53 SS-21 development was recently expanded to reflect an additional extraction step prior to off-site shipment of a major component. The project team originally planned to obtain an exemption to transport this component in its initially dismantled state and perform the extraction at the destination facility. However, NNSA headquarters recently determined that a transportation exemption is not warranted at this time. This additional operation will require the development of new procedures and tooling, as well as the fabrication of additional approved shipping containers. The September 2009 authorization date for B53 SS-21 operations will not be impacted by this development.

**Nuclear Safety Performance Indicators:** In June, PXSO requested that B&W Pantex provide information on a set of stand-alone nuclear safety performance indicators (e.g., technical safety requirement (TSR) violations, potential inadequacy in the documented safety analysis declarations, and unplanned limiting conditions of operation entries) to aid in identifying adverse trends that warrant corrective action. B&W Pantex responded to this request last week. Some indicators of note include an increase in the number of TSR violations from nine in FY06 and seven in FY07 to 11 through July FY08, and an increase of approximately 50 percent in the number of corrective maintenance work orders in the last two years. The indicators also reiterated previously identified shortages in the number of qualified nuclear safety officers and nuclear explosive safety study group members. In addition to the stand-alone indicators, PXSO has requested that B&W Pantex provide a precursor data analysis each month starting in September. This analysis will be more subjective in nature and will attempt to identify adverse trends by evaluating data from reportable event logs and issue tracking systems.

**Special Tooling:** A W76 operation was suspended this week when a piece of tooling (swingarm that protects sensitive components while in the workstand) prevented a vacuum fixture from being properly oriented. The swingarm is common to multiple programs and had recently been modified; however, this modification was not evaluated for conformance with tooling tolerances on the W76 program. B&W Pantex plans to evaluate the process for modifying tooling that is common to multiple programs to determine whether corrective actions are warranted.

**W76-1 First Production Unit (FPU):** W76-1 FPU assembly operations were suspended Friday after difficulty in mating two major components was experienced and, as a result, damage to a high explosive (HE) main charge occurred. Initial indications are that an alignment problem created by a tooling malfunction led to the pit tube contacting, and breaking off small pieces of, the charge. Tooling design is evaluating the situation. The HE charges will be replaced. This occurrence essentially puts the FPU back to the beginning of the cell assembly process.

**Workforce Reductions:** B&W Pantex recently announced that due to an anticipated \$54 million shortfall in the FY09 operating budget, a voluntary separation program has been implemented. The 350 affected positions are funded under Readiness in Technical Base and Facilities (RTBF) programs. Key organizations potentially impacted include the nuclear safety officers, radiological control, facility representatives, system engineering, training, and maintenance. The Directed Stockpile Work (DSW) funding allocation has not been finalized and a significant deficit has the potential to further affect staffing in support of critical mission work.