

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

**MEMO TO:** J. Kent Fortenberry, Technical Director  
**FROM:** Timothy Hunt and Dave Kupferer, Pantex Site Representatives  
**DATE:** 15 June 2007  
**SUBJECT:** Pantex Plant Weekly Report

**DNFSB Staff Activity:** Outside expert D. Boyd was at Pantex to observe the second week of the NNSA readiness assessment (RA) for W76-1 assembly and mass properties operations.

**Procedure Deficiencies:** During a recent NNSA quality assurance survey, it was observed that two procedures for processing a W88 joint test assembly (JTA) were developed and issued with a significant number of errors. The review team noted that the procedures were not usable, consistent, comprehensive, or accurate for their intended use. The mass properties operations had to be suspended on several occasions because of the numerous deficiencies identified within the critical-use nuclear explosive operating procedures (NEOPs). Pen and ink and annotated changes had to be made to allow operations to continue. The need for the procedure changes raised some concerns regarding compliance during past operations and the diligence with which inadequate procedures are corrected.

**PXSO Review of Technical Procedures:** PXSO began a comprehensive technical procedure adequacy review this week that will take a couple of months to complete. The PXSO facility representatives will select a sample of NEOPs and nuclear explosive engineering procedures (NEEPs), review them for usability and technical adequacy, and observe use of the procedures in the facilities. The overall objective is to determine the procedure quality (e.g. readability, clarity, usability, consistency, comprehensiveness, accuracy). The review will include evaluations of the documented safety analyses to ensure that applicable controls are incorporated into the procedures and verification of incorporation of the operations procedures elements outlined in DOE O 5480.19, *Conduct of Operations Requirements for DOE Facilities*.

**W76-1 NNSA Readiness Assessment (RA):** This week, NNSA completed its RA to determine whether BWXT is prepared to start-up SS-21 W76-1 assembly and mass properties operations. NNSA was originally schedule to begin this review the week of 7 May, but did not formally start the review until last week. Preliminarily, the RA team has identified three pre-start findings, all of which relate to procedure development and implementation; personnel failed to perform some steps of the procedures correctly, procedures had errors or failed to designate critical steps or steps requiring person-to-person coverage, and several procedure steps could not be performed as written. BWXT is anticipating that W76-1 operations will be authorized in a few weeks.

**W80 Hazard Analysis Report (HAR):** This week, BWXT retracted its submittal of the W80 HAR because of concerns communicated during preliminary discussions with members of the PXSO safety basis review team (SBRT). The SBRT identified more than 90 concerns, approximately 35 of which would have been considered conditions of approval. Some of the concerns were related to compliance with DOE-STD-3016, *Hazard Analysis Reports for Nuclear Explosive Operations*, requirements. BWXT is working to addresses the issues.