DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO:J. Kent Fortenberry, Technical DirectorFROM:Timothy Hunt and Dave Kupferer, Pantex Site RepresentativesDATE:14 September 2007SUBJECT:Pantex Plant Weekly Report

DNFSB Staff Activity: Outside expert R. Lewis was at Pantex to observe the second week of the W80 SS-21 disassembly and inspection NNSA readiness assessment.

Configuration Management of the Documented Safety Analyses (DSAs): Three months ago, PXSO completed an independent assessment of BWXT's processes to improve configuration management of the DSAs. Subsequent to the PXSO review, BWXT issued Revision 5 of the End-State DSA Project Plan. Among other actions, Phase I of this project includes an effort to identify mismatches between control descriptions and credited features within safety basis change packages that have been approved but not yet verified as implemented (i.e. are not yet effective or posted). Recently, BWXT discovered approximately 100 of these types of mismatches—varying in significance—in approved safety basis change packages that effect the Sitewide and Transportation Safety Analysis Reports. Subsequently, BWXT declared a potential inadequacy in the safety analysis (PISA). BWXT thoroughly reviewed each of the mismatch errors to determine whether or not compensatory measures were necessary and concluded that only three controls needed augmentation; two forklift controls and one fire barrier control. Phase II of the End-State DSA Project Plan includes a thorough review of DSA documents (not just change packages) and it appears likely that additional errors will be identified.

B83 Procedure: During the initial execution of the B83 dismantlement procedure, the technicians identified several steps that could not be performed as written. The procedure errors were generally typographical in nature and required pen and ink changes prior to resuming operations. Some of the errors had been communicated to the process engineer by the technicians during the procedure walkdown, but the engineer elected not to revise the steps.

New Information Process: BWXT recently issued a revised work instruction that is intended to expedite the processing of new information. Once the authorization basis department receives the new information, it must now be closed within 10 business days unless an extension is granted. The work instruction also revises the criteria used to determine when new information should be reported as a PISA. For example, the work instruction no longer requires the establishment of compensatory measures prior to declaring a PISA. However, the procedure lacks a formal mechanism to document the basis for why compensatory measures were not required upon discovery of a PISA.

Justification for Continued Operation (JCO): There are eight approved and implemented JCOs that augment Pantex safety analyses, four of which were issued prior to 2005 and three of which were issued during the past year. Most recently, BWXT issued a JCO regarding special nuclear material storage operations. In its approval letter, PXSO stated that, henceforth, JCO submissions shall have an explicit expiration date 12 months or less from the date of issuance. In addition, BWXT has been actively archiving JCOs during the past few months.

W88 Rebuild: The first W88 unit to be rebuilt using two new major Los Alamos National Laboratory components was completed last week.