

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 18 August 2006
SUBJECT: Pantex Plant Weekly Report

DNFSB Staff Activity: R. Rosen was on-site this week to observe the B83 Quarterly Program Review meeting. The meeting was also attended by LLNL, SNL, BWXT, and NNSA personnel.

PXSO Staffing: PXSO has distributed its new organizational chart. The new organization alignment resulted in an increase the number of facility representatives from seven to 11 within the new Facility Operations group (six of the 11 are fully qualified) and an increase in the number of safety basis analysts from four to six.

B61 Documented Safety Analysis Inadequacy: The first production unit resulting from the authorization of SS-21 B61 disassembly and inspection operations was delivered more than a month ago. A subset of the B61 operations are considered to be non-nuclear due to the low quantity of special nuclear material (SNM) involved. Therefore, BWXT developed a process hazards analysis (PHA) to evaluate the hazards and controls necessary during these non-nuclear operations. This week, BWXT safety basis analysts serendipitously discovered that the non-nuclear operation were authorized to be performed in the same facility as other nuclear operations. The PHA did not analyze the potential consequences of co-locating the hazards of non-nuclear operations with the larger quantities of SNM involved in the nuclear operations. More importantly, the documented safety analysis that evaluated the nuclear operations did not evaluate the hazards present during the non-nuclear operations. Therefore, BWXT declared a potential inadequacy in the safety analysis. BWXT relocated the non-nuclear operations to a separate facility. BWXT is planning to perform a root cause assessment that will evaluate the controls in place to prevent performing operations authorized in the master authorization agreement but have not been analyzed as part of a safety analysis.

Documented Safety Analyses Planned Improvements: Currently, there are 47 planned improvements identified in the Sitewide Safety Analysis Report. Examples of the planned improvements include additional analysis of lightning hazards, implementation of a high explosive transportation cart, qualification of compressed gas cylinder racks, analysis of crane failure modes, verification of assumed weapons responses, and qualification of approved containers. Two months ago, PXSO directed BWXT to submit a plan for accomplishing the aforementioned improvements. BWXT has committed to submit a resource loaded improvement completion schedule in January 2007.

Electrostatic Discharge (ESD) Training: During the past two weeks, BWXT's system engineering department conducted training to familiarize authorization basis and process engineering personnel with the principles of ESD related hazards and associated controls. BWXT management hope that this type of training will encourage plant personnel to alert the systems engineering department of future ESD hazards before they are introduced to nuclear explosive operations.

B83 Quarterly Program Review: BWXT and NNSA's ability to meet current B83 programmatic goals is dependant on B83 SS-21 authorization being granted no later than November 2006. Meeting the November milestone will require that corrective actions for electrostatic discharge concerns be approved and implemented in time to complete the contractor readiness assessment (RA) during September 2006 and the NNSA RA during October 2006.