

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 28 April 2006
SUBJECT: Pantex Plant Weekly Report

DNFSB Staff Activity: C. Martin, A. Matteucci, R. Rauch, J. Shackelford, and R. Tontodonato were on-site to review Pantex's path forward to implement multi-unit operations.

W56: This week, BWXT dismantled the last W56 non-spinner unit. BWXT has started dismantling W56 spinner units. The 10 CFR 830 exemption for the W56 program expires in five months.

W78 Midcase Removal: During the performance of a procedural step, the production technicians (PTs) did not communicate adequately to successfully complete the operation. A procedural step requiring dual operations was only partially performed. This resulted in the disassembly fixture malfunctioning and an increased force being applied to the unit. Production management then made the non-conservative decision to continue operations in an attempt to make an already safe weapon configuration safer. One subsequent completed corrective action was to provide training to the subject supervisors and PTs on conservative decision making. The operation was unsuccessfully restarted this week when another problem arose that prevented separation of the components. The operation was suspended pending further engineering analysis.

Unreviewed Safety Question (USQ) Screening Process: Based on a DOE evaluation last year of USQ program implementation complex-wide, PXSO requested in January that BWXT assess its USQ process to determine whether weaknesses related to pre-screening and screening exist at Pantex. An assessment performed by the BWXT USQ Program Group found that pre-screening criteria for editorial changes had been used inappropriately. The Authorization Basis Department randomly selected 78 recently pre-screened procedures/activities for review and found that three were incorrectly pre-screened from the USQ process. BWXT is implementing corrective actions to resolve the self-identified findings.

Pantex Throughput Improvement: This week, NA-12 met with representatives from PXSO, BWXT, and the design laboratories at Pantex to discuss the status of initiatives that are intended to improve Pantex weapon throughput. Multi-site contract incentives have been developed that would reward the following: authorizing B61 SS-21 operations by 30 June, authorizing W87 SS-21 operations by 30 June, and declare readiness for the B83 SS-21 NNSA readiness assessment by 30 September. During the meeting, the attendees raised questions as to why some high fidelity joint test assembly operations occur in nuclear explosive cells and whether those activities could be performed in non-nuclear, explosive facilities.

Temporary Storage of Pits: BWXT has requested that the design agencies provide formal direction on allowable storage duration of pits in non-sealed insert containers. Previous studies indicated that pits left in non-sealed insert containers for an extended period of time – greater than 5 years – face the possibility of corrosion. Currently, AL-R8 containers are used for in-process storage only; but no time limits are defined. BWXT requested the design agencies to determine if storage requirements are warranted and, if so, recommended container and facility environment specifications.