

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 2 March 2007
SUBJECT: Pantex Plant Weekly Report

DNFSB Activity: M. Duncan was onsite to observe the second week of Phase I (disassembly and inspection operations) of the W76-1 Nuclear Explosive Safety Study (NESS). C. Martin, A. Matteucci, A. Gwal, W. Von Holle, and outside expert R. Collier were onsite to discuss electrostatic discharge hazards and controls with cognizant PXSO and BWXT personnel. In addition, A. Matteucci observed the B53 NESS that is evaluating off-loading operations and B. Von Holle observed the quarterly pit management meeting.

B53 Off-Loading and Staging Reviews: A limited scope NESS and contractor readiness assessment (CRA) were performed this week to evaluate B53 off-loading and staging activities. It is not anticipated that the NESS group will have any findings, although the group expressed concern with the possible storage scenario where B53s could be collocated with a neutron source. The CRA noted several pre-start findings associated with equipment pedigree and controls identified in the documented safety analysis. BWXT's goal is to commence receipt of units later this month.

Electrical Grounding: As part of the project a few years ago to address alternate lightning pathways into nuclear facilities, two Building 12-60 bays were rewired and full surge suppression installed. During a recent triennial ground impedance test, it was discovered that the transformer that was installed by BWXT electricians did not have the neutral conductor bonded to facility ground, an NFPA 70 National Electrical Code (NEC) violation. The grounding electrode had been installed as required by code, but the NEC required bond between the panel's neutral conductor and grounding terminal blocks was not installed. The 120V circuit provides power to mass properties equipment. BWXT is investigating why the initial acceptance testing did not find the deficiency.

Unreviewed Safety Question (USQ) Program: In January, BWXT requested PXSO approval of revised USQ program procedures. This week, PXSO rejected the procedure revisions because the procedures do not clearly identify when the USQ process is required and the program does not clearly identify a process that can be easily followed or implemented.

Worker Safety and Health Program: Title 10, Code of Federal Regulations, Part 851 (10CFR851), *Worker Safety and Health Program*, requires contractors at DOE sites to establish a worker protection program to reduce or to prevent potential worker injuries, illnesses and accidental losses and applies to design, construction, operation, maintenance, decontamination and decommissioning, research and development, and environmental restoration activities. To meet this requirement, BWXT recently submitted its *BWXT Pantex Worker Safety and Health Program (WS&HP)* to PXSO. The WS&HP is focused on protection of workers from workplace hazards and specifically precludes addressing radiological hazards. BWXT has performed a gap analysis against the specific requirements of 10CFR851. The gap analysis indicates that approximately 10 percent of the requirements are not met.