

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy J. Dwyer, Technical Director
FROM: Matthew Duncan and Rory Rauch, Pantex Site Representatives
SUBJECT: Pantex Plant Report for Week Ending March 5, 2010

W78 Operational Safety Review (OSR): In November 2009, NNSA convened an OSR (a five year re-evaluation of an operation by nuclear explosive safety (NES) personnel) of W78 disassembly and inspection operations. In December, the OSR group issued a report to NA-122 for review and final approval identifying one pre-start and one post-start finding. The pre-start finding captured the judgment of the OSR group that NES was not assured during W78 disassembly for certain operations around bare conventional high explosives.

PXSO recommended the pre-start finding be re-categorized (to a post-start finding or deliberation topic), citing its judgment that the issues identified by the OSR group would not make the operation unsafe if left unaddressed. Upon further consideration, the OSR chairman also recommended the finding be re-categorized (to a post-start finding) based on actions taken by the W78 project team to correct most of the shortcomings that led to the finding. Based on these recommendations, NA-122 re-categorized the finding as a post-start and formally approved the OSR group's report. The other post-start finding, which captured the discovery that the ground strap on a transfer cart would fail to maintain electrical continuity with the static dissipative floor if perturbed in a specific way, was left as originally categorized. NA-122 designated PXSO as the federal lead for managing the findings.

Tritium Detected: Technicians were removing a tritium reservoir from a W76 when the portable airborne tritium detector alarmed, indicating airborne activity levels exceeding $10,000 \mu\text{Ci}/\text{m}^3$. It should be noted that the facility-level detector never alarmed. The alarm occurred at an unexpected point in the procedure following several steps in which the technicians had already tested for signs of bottle actuation. The technicians eventually evacuated after receiving instructions to do so from their supervisor. After the evacuees arrived at the muster station, the supervisor contacted radiation safety. Radiation safety personnel entered the facility twice within a 30 minute period, found readings consistent with activity levels normally encountered during this operation (approximately $50 \mu\text{Ci}/\text{m}^3$), and confirmed it was safe to restart operations, pending NES approval. Detector readings during reservoir removal are the result of tritium off-gas collecting in a valve on the unit. Radiation safety personnel believe the higher levels of off-gassing on this unit are the result of the length of time the bottle had been installed.

Nuclear Security Enterprise Reengineering Activities: B&W Pantex recently evaluated the feasibility of tailored governance reform and concluded the Kansas City Plant (KCP) governance model could easily be applied to most operations at Pantex. The study focused on the element of the KCP governance model that involves directives reform. B&W Pantex identified 96 of the 350 directives in the contract for initial consideration (directives governing nuclear operations were excluded) and recommended to PXSO that it use the results of the analysis conducted by KCP (rather than conducting its own analysis) as the basis for how to disposition these directives. PXSO formally concurred with this approach and asked B&W Pantex to develop an FY10 project execution plan. B&W Pantex indicated in the memo transmitting this evaluation that directives governing nuclear operations may be examined for reform in the future.

B&W Staffing: Greg Meyer resigned from his position as General Manager of the Pantex Plant. John Woolery, the former Deputy General Manager for Operations, replaced him on Friday.