

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: J. Kent Fortenberry, Technical Director
FROM: Timothy Hunt and Dave Kupferer, Pantex Site Representatives
DATE: 21 July 2006
SUBJECT: Pantex Plant Weekly Report

DNFSB Staff Activity: A. Hadjian, B. Jones, R. Raabe, and outside expert J. Stevenson were onsite to review seismic issues associated with nuclear explosive facilities.

Nuclear Material Transportation: During transport of an item with potential radiological concerns between pit surveillance and repackaging facilities, Radiation Safety support and monitoring was not requested. There appears to have been a failure to link a temporary engineering instruction to the technical procedure it supported that would have directed the technicians to solicit Radiation Safety involvement during the move. It has been concluded that no radioactive release occurred during the time the item was unmonitored.

Loss of Site Power: Early Sunday morning, due to a significant power outage experienced in most production areas, nuclear facilities were placed in maintenance mode. The initial investigation indicated that rodent infestation in the area of a distribution system component in the North Substation kicked off the chain of events that led to the loss of power in dozens of nuclear facilities in Zone 12 South. A few nuclear explosive operations were active when the power was lost to the facilities. The emergency lights operated as expected and Limiting Conditions of Operations related to the blast door interlocks and deluge fire suppression system were entered. Resumption of operations was controlled using formal work suspension and release processes. Authorization to resume nuclear explosive operations required Manufacturing Division Manager approval and was handled on a facility by facility basis. All facilities were authorized to restart by Wednesday. Lessons learned from previous loss of power events benefitted BWXT while recovering from this event. In particular, system engineering personnel were more heavily involved and had previously created configuration management tables to facilitate more quickly identifying affected systems and improve tracking of recovery actions.

Nuclear Explosive Safety (NES): As part of a Pantex Throughput Improvement Plan action, PXSO has drafted a paper proposing changes to the current NES review process that it thinks would make it a more effective and efficient tool for risk-informed decision making. The general contention is that the safety analysis process in place at Pantex that meets 10CFR830, *Nuclear Safety Management*, requirements makes many NES actions outdated and irrelevant. The report suggests that enhancements to the process would result if controls imposed by the NES study group were optional, the scope and length of reviews were reduced, the requirements for a NES study and use of NES change control were significantly limited, and NES master studies were discontinued. It is expected that some of these points will be vigorously debated within the NES community before a final product is issued.

W88 Restart Project: Last week, BWXT requested an exemption to the requirements of 10CFR830.207(a), which would specifically release BWXT from submitting a W88 Hazard Analysis Report (HAR) compliant with DOE Standard 3016 (DOE-STD-3016), *Hazard Analysis Reports for Nuclear Explosive Operations*. BWXT noted that the present W88 HAR, which utilizes W78 weapons response information, and the implementation of Sitewide Safety Analysis Report controls provide a sufficient level of safety such that there is little, if any, risk associated with the continued use of the current HAR for cell operations. BWXT is currently planning to submit a W88 HAR that is compliant with the requirements of DOE-STD-3016 in March 2009.