

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

MEMO TO: Timothy Dwyer, Technical Director
FROM: Matthew Duncan and Rory Rauch, Pantex Site Representatives
SUBJECT: Pantex Plant Report for Week Ending March 23, 2012

Nuclear Explosive Safety (NES): This week, B&W issued a report in response to the February 1, 2012, memo from PXSO requesting a review of the state of the NES change control process, its functional transparency, and associated reporting relationships (see 2/3/12 report). The report identified eight judgments of need (JONs). The JONs recommend increasing the number of field observations by B&W NES reviewers, increasing the documentation supporting a NES change control decision, clarifying the role of the B&W NES department (whether it is an oversight or support group), and establishing a work environment that allows the NES department members to satisfy their role. The cover letter transmitting the report commits to generating a corrective action plan by May 2, 2012. In addition, the B&W General Manager, as a compensatory measure until specific corrective actions have been implemented, has directed a change to B&W's organizational structure requiring the NES department manager to report directly to him.

Fire Suppression System Impairment: B&W fire protection procedures typically require a fire watch if operations are to be performed in a facility with an impaired fire suppression system. Recently, transportation personnel performed nuclear material and nuclear explosive loading and offloading operations on several different occasions without performing a fire watch at a dock with an impaired fire suppression system. The dock's fire suppression system is not credited in the safety basis and therefore did not require a limiting condition of operation. A PXSO facility representative discovered the issue when he observed zero pressure at the gauge on the dock's fire suppression system risers and noted that a posting identifying the impairment of the system and associated compensatory measure (to establish a fire watch) had expired approximately one month prior. One of the responsible facility managers reviewed the status of the fire suppression system for the dock, confirmed that it was still impaired, updated the posting, and contacted transportation personnel to inform them of the updated posting and the need to re-institute the fire watch during operations at the dock.

B&W began the causal analysis for the event this week. Though the causal analysis is not finalized, it appears the primary cause of the event is that B&W had not formally documented personnel roles and responsibilities for tracking non-credited safety system impairments and associated compensatory measures. B&W transportation department management also plans to explore why personnel involved in loading dock operations never brought the expired posting to the attention of facility management or fire protection engineering.

B83 NES Study (NESS): Last week, the PXSO manager formally transmitted the NESS report for B83 SS-21 operations with upgraded tooling. The NESS group identified two post-start findings. One of the post-start finding identified that excessive noise, created primarily by the vacuum monitor pump, could degrade NES by making it difficult for the technicians to communicate with one another and hear public address announcements. The other finding identified that the security covers used during B83 operations, which allow technicians to conduct work in zone coverage (the less restrictive of the two-person concept operational modes), are not designed to fully support zone coverage requirements. PXSO also requested that B&W evaluate several deliberation topics from the report that did not rise to the level of NES findings. As indicated in the February 12, 2012, approval memo from the Deputy Assistant Administrator for Stockpile Management, the six senior technical advisor comments will be addressed and tracked separately.