

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 5, 2002

**MEMORANDUM FOR:** J. K. Fortenberry, Technical Director  
**FROM:** H. Waugh and W. White, Pantex Site Representatives  
**SUBJECT:** Pantex Plant Activity Report for Week Ending April 5, 2002

**DNFSB Activity Summary:** H. Waugh was on site all week. W. White was on leave Monday and was on site for the remainder of the week.

**Transportation Safety Analysis Report:** On Monday, ASO released its Safety Evaluation Report (SER) for the *Transportation Safety Analysis Report Module (TSAR) Phase I and Associated Technical Safety Requirements*. This phase of the TSAR addresses on-site transportation of weapons in the full-up or ultimate-user configuration. Phases II and III of the TSAR will address on-site transportation of partial weapon configurations and nuclear material.

ASO approved the TSAR, provided BWXT addresses multiple conditions of approval. There were five conditions of approval, labeled as 'category A comments,' that require BWXT action prior to issuing the TSAR for use at Pantex. BWXT must address an additional ninety-three conditions of approval, labeled as 'category B comments,' prior to the next revision of the TSAR. ASO requested that BWXT provide a response to the category B comments within sixty days, after which ASO would issue the final set of category B comments.

The category A comments include requests that BWXT add additional controls for certain scenarios and develop in-service inspections for other existing controls. In the category A comments, ASO also requested that BWXT take certain elements of its programmatic administrative controls and change them into specific administrative controls in the technical safety requirements. ASO requested that an element of a programmatic administrative control be written as a specific administrative control if it is required to implement a design feature or if it is a significant contributor to preventing an accident.

In approving the TSAR, ASO agreed that the controls in the TSAR were adequate to allow continued safe operations at Pantex, but raised questions regarding the adequacy of the safety analysis. ASO noted that the TSAR "should not be considered a benchmark safety document for Pantex." In the SER, ASO identified eleven specific areas for improvement in the next phase of the TSAR. [II.A]

**Sealed-Insert Container Surveillance:** On Thursday, BWXT completed additional surveillance operations on the sealed-insert container which had previously failed its leak check. The container once again failed surveillance with results similar to those reported in previous weekly reports. The repeat of the surveillance operation, observed by the Board's site representatives, was accomplished by production technicians and the container engineer in a reasonably thorough manner. Initial indications from a leak detector indicated the possibility of a leak through the container flange. Additional inspections identified a foreign object across the container gasket that is the suspected cause of the leak. The small measured leak rate, while exceeding specifications, would not likely compromise container integrity in the near term. [II.A]

**Enhanced Transportation Cart:** On Wednesday, ASO approved the use of the enhanced transportation cart for transporting certain W76 configurations. This will represent the first application of the new cart, which provides significant (but not yet credited) protection from thermal, electrical and mechanical insults during transportation. The cart also provides Faraday cage protection, and transportation of certain W76 configurations in the cart will be allowed during lightning warnings. A nuclear explosive safety review will be required before the cart can be implemented and the restriction on movement during lightning warnings lifted. The cart will be implemented for most other weapons programs later this year. [II.A]