

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 26, 2016

**MEMO TO:** Steven Stokes, Technical Director  
**FROM:** Ramsey Arnold and Zachery Beauvais, Pantex Site Representatives  
**SUBJECT:** Pantex Plant Report for Week Ending August 26, 2016

**DNFSB Activity:** Board Chair J. Connery and staff members C. Berg, J. Deplitch, and M. Helfrich were onsite to observe an emergency preparedness and response exercise. Further, the Chair and Board staff attended an agreement-in-principle meeting held in Carson County.

**Emergency Exercise:** Pantex performed a site-wide, full participation emergency exercise that simulated an explosion and radiological release (both onsite and offsite) during a transportation activity. This was the first site-wide exercise conducted since 2011 that simulated significant radiological consequences. The Chair and staff observed multiple elements of the simulated emergency response, including activities at the operations center, emergency operations center, incident command, and event scene. The plant shift superintendents properly categorized and classified the event in a timely manner. During the exercise, emergency responders performed rescue and triage of personnel with simulated injuries and radiological contamination. The protective actions initiated as a result of the release prevented radiation safety technicians from immediately deploying to the incident scene. Radiation safety technicians arrived at the incident scene approximately ninety minutes after the initiating event, preventing them from performing contamination control during the immediate response. Once at the scene, they determined the contamination levels present on the non-injured players and accompanied those players to onsite decontamination facilities. Offsite participants in the exercise included local county emergency operations centers, the joint information center, and representatives from the Texas Safety and Public Health Department who performed offsite field monitoring for radiation.

**Weapon Disassembly Authorization:** Last week, a CNS review team completed the Contractor Readiness Assessment (CRA) of disassembly operations for surveillance on one weapon program. The CRA follows the completion of a readiness verification of these operations (see 4/22/2016 and 6/24/2016 reports). The CRA team identified four pre-start findings and two post-start findings. Two of the pre-start findings directly related to a management decision to proceed with the CRA prior to NPO approval of changes to the authorization basis documents for these operations. As a result, the CRA team could not verify that facility safety basis documentation was in place and that the unreviewed safety question determination procedure was effectively implemented prior to the start of the CRA. The CRA team noted in a lessons learned that approaching the CRA without an approved safety basis presented complications. NPO approved the safety basis change package earlier this month (see 8/5/2016 report). The remaining CRA team pre-start findings included an absence of a formal nuclear criticality safety review of the proposed operations and a disconnect in the implementation of lightning protection controls for certain weapon configurations. This week, the Nuclear Explosive Safety (NES) Study Group also completed their evaluation of these operations, resulting in no findings against the NES standards. NNSA plans to conduct a federal readiness assessment next month.

**Shear Wire Removal:** Production technicians successfully executed a nuclear explosive engineering procedure to extract stuck shear wires from a unit in a nuclear explosive cell. This was the second use of a case opener tool designed to facilitate shear wire removal in a controlled manner (see 1/8/2016 report).