

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 23, 2016

MEMO TO: Steven Stokes, Technical Director
FROM: Ramsey Arnold and Zachery Beauvais, Pantex Site Representatives
SUBJECT: Pantex Plant Report for Week Ending September 23, 2016

DNFSB Staff Activity: J. Anderson, C. Berg, and C. Scheider were on site to observe two separate nuclear explosive safety (NES) change evaluations (NCE). The first NCE evaluated the implementation of new special tooling that reduces the hazards of mechanical impact to exposed high explosives on one weapon program. The second NCE evaluated proposed operations to replace a broken relief valve on a unit. Both NCEs concluded with no findings against the NES standards, however, the NCE to replace a broken relief valve noted in a deliberation topic that the proposed operations direct additional, unnecessary processing of the unit.

Anomalous Units (AU): Last week, NNSA convened an NCE to evaluate the updated design agency weapon responses and proposed process for continuing dismantlement of two AUs (see 9/9/16 report). Based on the bounding technical basis presented by the project team, the NES study group agreed that sufficient measures are in place to ensure NES during the proposed unit disassembly with already approved procedures. Additionally, NPO issued a safety evaluation report to approve the authorization basis change package for the potential operations with a new, specialized cap, if needed. This week, production technicians began disassembling both AUs. The site representatives observed the resumption of bay operations for both of these units.

Disassembly for Surveillance: NPO completed a federal readiness assessment (FRA) that identified four pre-start findings, two post-start findings, and five observations (see 9/9/16 report). Two pre-start findings and an observation noted inadequacies with radiation safety department practices. Additionally, the FRA team identified that the emergency drill conducted as part of the FRA lacked proficiency in several areas, including control of contamination and self-critical evaluation. CNS submitted and NPO approved closure packages for pre-start findings and corrective action plans for post-start findings. Late this week, CNS initiated the first disassembly for surveillance operations on this program conducted since 2012.

Technical Safety Requirement (TSR) Violation: CNS transportation management discovered that a TSR violation had occurred during limited weekend transportation activities when a safeguards transport (SGT) trailer was parked in an unapproved location. Because trailer pads were at capacity, an additional SGT trailer needed to be parked at an approved but not normally used location. The two transportation personnel contacted their offsite supervisor who instructed them to use an approach to a staging magazine, an unapproved location. When the trailer was being parked, one transportation worker decided to park in a separate, unapproved location, across the road from the magazine so the trailer would not extend into the roadway.

Loss of Two-Person Zone Coverage: As two PTs were entering a nuclear explosive bay, one PT stayed in the ramp to assist in unloading supplies that just arrived. The other PT did not notice this and proceeded through the blast door interlock alone which caused a loss of two-person zone coverage of a unit present in the facility. The PTs immediately realized the error, stayed in contact with one another via verbal communication through the door, and contacted the facility representative and production manager. Additionally, a third PT outside of the facility entered the facility to reestablish two-person zone coverage.