

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 23, 2016

**MEMO TO:** Steven Stokes, Technical Director  
**FROM:** Ramsey Arnold and Zachery Beauvais, Pantex Site Representatives  
**SUBJECT:** Pantex Plant Report for Week Ending November 25, 2016

**Work Authorization:** Last week, CNS paused construction work performed by a subcontractor to replace the asphalt on a section of plant roadway used for nuclear explosive transportation within the material access area (MAA), after CNS personnel determined that the project had not been reviewed for compliance with the safety basis. The asphalt repair required the use of up to 1000 gallons of flammable, petroleum-based prime oil and equipment that could contain up to 75 gallons of diesel fuel. CNS personnel questioned whether use of these quantities of combustible liquids had been appropriately dispositioned through the unreviewed safety question process. Safety analysis engineering determined that it had not been previously reviewed, as required for work performed within the MAA, but subsequently determined that the project can be executed within the existing safety basis. As part of the event investigation process, CNS determined that the subcontract technical representative allowed subcontractor personnel to commence the construction based on approved procurement documentation, scoped for road-striping and small-scale road repair, as opposed to the required work authorization forms. This project impacted the use of normal transportation routes; previously, the site representative questioned the formality of plant approvals used to resume operations at an alternate location (see 11/4/2016 report).

**35-Account Program:** CNS recently established an issue resolution team (IRT) to develop a revised program definition for the 35-account process, to address all phases of the process including specification identification and testing requirements. The IRT was established to address systemic issues with the program following the ineffectiveness of corrective actions developed to address previous problems (see 12/6/2013, 4/29/2016 and 7/1/2016 reports). While the majority of 35-account materials do not have a specified safety function, a number of items procured and certified through this process are relied upon to perform safety-class functions including protective floor coverings, pneumatic hose restraints, and static dissipative gloves.

**Dissipative Containers:** CNS completed an implementation verification review for introduction of inherently dissipative, stainless steel containers on one weapon program. CNS specified the use of dissipative containers as the path forward to resolve a potential inadequacy of the safety analysis declared in 2015 related to the use of Army-Navy containers to store sensitive components (see 3/27/2015 report). CNS will exit the justification for continued operations, which had specified compensatory measures including the use of copper tape adhered to a sanded portion of the container (see 6/5/2015 and 10/7/2016), following implementation of the updated nuclear explosive operating procedures and component packaging procedures.

**Maintenance Procedure Use:** During a causal analysis meeting for a recent technical safety requirement violation that occurred during fire suppression system preventive maintenance (see 11/18/16 report), the site representative identified that maintenance personnel executed an out-of-date revision of the procedure. Although the procedure was revised to only incorporate minor changes that did not affect the execution of surveillance requirements and in-service inspections, maintenance was not aware of the change. Unlike nuclear explosive operations, the current process for executing maintenance work on safety systems does not require personnel to complete a final check to confirm that the most current procedure will be used.