

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 8, 2017

**MEMO TO:** Steven Stokes, Technical Director  
**FROM:** Ramsey Arnold and Zachery Beauvais, Pantex Plant Resident Inspectors  
**SUBJECT:** Pantex Plant Report for Week Ending September 8, 2017

**Readiness Activities:** NNSA completed a readiness assessment (RA) of proposed operations to support an upcoming alteration on one weapon program. The NNSA RA follows a contractor RA completed last month that identified pre-start findings related to (1) specific administrative control (SAC) flowdown for vacuum chamber operations, (2) flowdown of explosive safety requirements for packaging operations (see 8/11/17 report), (3) consistency of quality hold-points, and (4) use of wrist-dosimetry. The NNSA RA carried the SAC finding as a manageable open pre-start, validated the closure of the remaining findings, and identified additional issues, including the following: (1) a pre-start finding that program specific-SAC implementation did not comply with DOE guidance or local implementing procedures for evaluating the human performance of operators required to perform the SAC; (2) a post-start finding on the sequencing of the implementation verification review, relative to the RA; (3) a post-start finding on the specificity of special tooling inspection criteria; and (4) post-start findings on general safety and facilities issues. CNS has begun conducting causal analysis and corrective action identification activities to address the issues.

Additionally, CNS completed demonstrations for a contractor RA of proposed operations to support a repair campaign on one weapon program. The resident inspectors observed limited demonstrations last week. NNSA plans to complete a separate RA.

**Nuclear Explosive Operations:** Last week, production technicians (PT) successfully performed a nuclear explosive engineering procedure (NEEP) to remove a damaged detonator cable assembly (DCA) from a unit. The damage previously prevented PTs from applying protective polyamide tape, per their procedure, and was determined by the appropriate personnel to meet the criteria to be handled as an anomalous unit (see 5/12/17 report). Per the NEEP, the PTs were able to apply the protective tape after removal of other components before resuming their normal operating procedure. The resident inspectors observed the condition of the DCA following its removal, discussed the operation with the PTs and production management, and observed further disassembly activities on the unit. During execution of the NEEP, production management addressed special tooling that had expired while operations on the unit were paused, per the allowances of local procedures.

**Qualified Containers:** CNS resumed inter-zone moves of AL-R8 sealed insert containers, under the provisions of a justification for continued operations. The moves allow commencement of surveillance activities in support of the extent of condition review on container corrosion.

**Special Tooling:** The resident inspectors observed preventive maintenance activities performed by area mechanics and electricians on special tooling. The observed maintenance activities included those on credited and non-credited special tooling, including in-service inspections. The area mechanics and electricians demonstrated strong knowledge of the tooling under inspection. The resident inspectors noted a continued reliance on the knowledge of production tooling personnel to assure effective maintenance is performed, and provided specific observations to production tooling and tooling engineering management.