

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 14, 2016

MEMO TO: Steven Stokes, Technical Director
FROM: Ramsey Arnold and Zachery Beauvais, Pantex Site Representatives
SUBJECT: Pantex Plant Report for Week Ending October 14, 2016

DNFSB Staff Activity: D. Brown, A. Hutain and C. Scheider attended weapons training on site.

Special Tooling Configuration Management: Tooling and Tester Design (TTD) management discovered that TTD personnel have been using an ad hoc process to make editorial changes to special tooling drawings and analyses for approximately two years. Per the ad hoc process, record copies of tooling drawings and analyses were updated but outside of the approved process and not officially issued. The process is outside of the currently allowed TTD processes. TTD is reviewing all affected tooling documents to confirm that all changes performed in this manner are editorial in nature and do not affect the tooling form, fit, or function. CNS does not believe that any of the known changes affect safety or quality.

Causal Analyses: A site representative attended causal analysis meetings related to two recent events: the installation of an expired piece of special tooling (see 9/30/2016 report) and a violation of the technical safety requirements for safeguards transporter parking (see 9/23/2016 report). The installation of expired special tooling occurred during disassembly operations for an anomalous unit that had been in staging for several months, during which, the tooling exceeded its specified preventive maintenance period. To prevent such a recurrence, a production technician suggested that procedures directing future operations with off-normal units that have had a similar time delay include a note to explicitly check for the expiration dates of installed tooling. Process engineering has committed to revise the procedure writers' guide to provide clarification on how to address these situations. Participants at the causal analysis meeting related to the TSR violation detailed contributing causes related to the availability and condition of infrastructure, clarity of the operating procedures, and connections between the operating procedure and safety limits. The causal analysis teams and cognizant management personnel are still determining the appropriate corrective actions.

Hazard Analysis Task Teams (HATT): CNS Program Integration and Safety Analysis Engineering personnel hosted a HATT familiarization workshop designed to introduce new design agency weapon response developers to the HATT walkdown process. The training included demonstrations of a nuclear explosive operation (NEO) in a training bay followed by demonstration of hazard analysis tools used to identify hazards and evaluate the NEO. The workshop allowed design agency personnel to discuss issues they had encountered in past HATTs. Also, last week, the NNSA Office of Nuclear Weapon Stockpile (NA-122) issued a memo to convene a working group to develop guidelines to be used by HATTs when conducting hazard identification and analysis activities. The working group consists of members from NNSA, NPO, CNS, and the design agencies.

Special Tooling Upgrade: NPO issued a safety evaluation report approving the CNS authorization basis change package for implementing new special tooling that reduces the hazards of mechanical impact to exposed high explosives on one weapon program (see 9/23/16 report). CNS will perform the implementation verification review prior to utilizing the new special tooling in NEOs.