

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 21, 2018

TO: Steven A. Stokes, Technical Director
FROM: Ramsey P. Arnold and Zachery S. Beauvais, Resident Inspectors
SUBJECT: Pantex Plant Activity Report for Week Ending June 22, 2018

Unreviewed Safety Questions (USQ): Last week, CNS declared a potential inadequacy of the safety analysis (PISA) when they determined that an engineering tooling analysis of a preparation cart on one program was not bounding. The tooling analysis assumed a smaller cart load than analyzed in the hazard analysis report (HAR) for a postulated toppling hazard caused by a seismic event or a production technician (PT) trip. CNS implemented an operational restriction to prohibit the use of the preparation cart. CNS will complete the USQ determination and disposition the results as needed prior to resuming affected operations. DNFSB staff provided specific questions on this topic prior to the PISA declaration (see 6/15/18 report).

This week, CNS declared a PISA on one weapon program when they determined that electrostatic discharge (ESD) parameters involving an electrical tester may not be bounding. CNS is implementing operational restrictions to bond the tester during its usage, eliminating the ESD hazard. A PISA, subsequently a positive USQ, for the same tester on a separate weapon program was declared in April. The tester is also authorized on three additional programs; CNS has not determined if the same non-bounding ESD parameters are used on them.

Nuclear Explosive Operations: Last week, the resident inspectors observed the nuclear explosive safety (NES) change evaluation (NCE) for proposed operations to free workstand trunnions and continue cell disassembly operations. The trunnions became locked during the execution of a recent temporary procedure to address a separate tooling issue (see 6/8/18 report). The new, proposed temporary procedure has tool makers partially disassemble the workstand to free the locked trunnions. PTs are in the direct vicinity of the operation to maintain control of the unit in the workstand. During the NCE, the resident inspectors discussed the training of the tool makers. The tool makers did not receive any formal weapon training—neither general, nor program-specific; however, during the development and demonstrations of the temporary procedure, the tool makers familiarized themselves with the operations. The NES study group also reviewed the proposed production tooling work order; however, the work order did not include any general production operations or program-specific safety requirements for the tool makers. Based on the resident inspector observation, production management plans to brief the tool makers on applicable safety requirements prior to the execution of the temporary procedure. The NCE documented no findings against the NES standards. Prior to executing the temporary procedure, CNS will need to disposition the preparation cart PISA (see above).

Documented Safety Analysis (DSA) Annual Update: Last week, NPO rejected the CNS request to delay the submittal of the 2018 annual update for a specific weapon program HAR. In its request, CNS asked to delay submitting the annual update and complete it in conjunction with the on-going HAR upgrade scheduled to complete by the end of this year. However, in December 2017, CNS submitted a schedule for planned 2018 annual updates that included this HAR with a submittal date of April 2018. For several years, CNS has struggled with completing DSA annual updates on an annual basis (see 1/6/17 report). NPO directed CNS to submit the HAR annual update as soon as possible.