

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 13, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: Zachery S. Beauvais and Miranda McCoy, Resident Inspectors
SUBJECT: Pantex Plant Activity Report for Week Ending September 13, 2019

DNFSB Staff Activity: J. Anderson observed and evaluated a nuclear explosive safety (NES) change evaluation for implementing new electrical testers and observed resumption activities.

Weapons Operations: CNS management has resumed all weapons operations that were paused last week (see 9/6/19 report). CNS management implemented a controlled resumption strategy that involved “advanced and enhanced” oversight from CNS management and nuclear safety staff. As part of the strategy, the CNS senior director for weapons operations individually briefed each crew of production technicians (PT) to reinforce the company’s expectations for attention to detail and proficient operations. After crews had received their initial briefing, CNS management conditionally released them to perform nuclear explosive operations under the observation of first line production supervisors (i.e., production section managers, PSM) or nuclear safety officers (NSO). The PSMs are evaluating the PT’s performance using the plant’s established conduct of operations assessment template, which requires evaluations of procedure adherence, procedure adequacy, use of the reader/worker/checker protocol and implementation of two person control. Parallel to the direct oversight provided by the PSMs and NSOs, CNS NES representatives and production managers are evaluating the performance of production crews and providing feedback to the senior director for weapons operations. Based on this feedback, the senior director for weapons operations will decide whether to release individual production crews from the “advanced and enhanced” oversight. During field observations, the resident inspectors and DNFSB staff verified the increased presence of management in the nuclear explosive operating areas.

Safety Basis: The resident inspectors participated in meetings with NNSA, CNS, and design agency personnel regarding Pantex safety basis redesign efforts. The meetings focused on considering high level changes to the Pantex safety basis, safety basis development and approval processes, and related directives. The group was also briefed on a separate, but related, effort to revise the Pantex safety basis in the near future (see 8/2/19 report).

CNS safety analysis engineering declared a potential inadequacy of the safety analysis (PISA) regarding the effectiveness of the control set for electrostatic discharge from free-standing equipment on one program. This PISA declaration follows one early this year regarding internal electrical hazards with the same program (see 9/6/19, 3/29/19, and 1/18/19 reports). While operations involving this unit are already paused as an operational restriction for the related PISA, an additional operational restriction prohibiting disassembly was documented.

A weapons design agency recently issued an information engineering release to inform CNS management of discrepancies identified in the weapon response for one weapon program. Discrepancies were identified during a recent series of reviews performed by DNFSB staff (see 6/7/19 report). CNS safety analysis engineering evaluated the information through their problem identification and evaluation process and determined that it did not represent a PISA.