

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 30, 2015

MEMO TO: Steven Stokes, Technical Director
FROM: Christopher Berg, Acting Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending January 30, 2015

DNFSB Staff at the Pantex Plant: Z. Beauvais was onsite to attend a W87 weapon familiarization course. C. Berg was onsite to provide Site Representative augmentation.

Update on the Positive Unreviewed Safety Question (USQ) Determination for Electro-Static Discharge Scenario: The NNSA Production Office (NPO) issued a Safety Evaluation Report authorizing Consolidated Nuclear Security, LLC (CNS), to perform limited operations on units in the Ultimate User configuration for one weapon program. (See report for 1/23/2015.) CNS has trained the Production Technicians (PT) on the modified Nuclear Explosive Operating Procedures that require the PTs to use bonding straps, and performed the Implementation Verification Review. This subset of operations has resumed.

At the time of this report, CNS is still awaiting an Information Engineering Release from the Design Agency for weapon response information related to the remainder of the operations and configurations with this electro-static discharge hazard. These affected operations remain paused.

Anomalous Unit Determination: On January 26, 2015, PTs suspended a nuclear explosive disassembly operation and placed the unit in a safe and stable configuration, after observing an unanticipated crack in a high explosive charge. Representatives from CNS process engineering, CNS nuclear explosive safety, and the Design Agency determined on January 29, 2015, that the nuclear explosive configuration meets anomalous unit criteria (i.e., conditions or damages potentially affecting nuclear explosive safety and/or resulting in an unanalyzed configuration). An Anomalous Unit Ad Hoc Project Team will be assembled to establish a path forward for this unit, including the drafting of a Nuclear Explosive Engineering Procedure.

Conduct of Maintenance: On January 23, 2015, an Instrument Technician conducting planned preventative maintenance in a Special Nuclear Material Facility received a higher than anticipated radiological dose, which approached a quarter of the site Administrative Control Limit. During this operation, the technician was calibrating Thermal Monitoring Systems, as permitted by the preventative maintenance work order and as detailed in the pre-job briefing. However, for convenience, unplanned additional tasks were performed under this preventative maintenance work order, which was believed at the time to cover such operations. Conducting the additional work resulted in longer exposure times for the individual Instrument Technician.

An event critique was held on January 27, 2015, and determined that the additional work performed should have been covered under a facility modification work order, which would have driven proper hazard screenings and USQ determinations. As the additional tasks were performed outside the authorized work instruction, this scenario was categorized as a management concern.