

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 27, 2015

MEMO TO: Steven Stokes, Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending March 27, 2015

Positive Unreviewed Safety Question Determination (USQD) for Electro-Static Discharge (ESD) Scenario: Last week, Consolidated Nuclear Security, LLC (CNS) declared a Potential Inadequacy of the Safety Analysis (PISA) when they discovered that the Sylgard™ used to secure a protective cap was not credited in the Documented Safety Analysis (DSA). CNS originally only credited the cap in the DSA. The Sylgard™ was incorporated into the engineering analysis but not credited for mitigating the ESD hazard. This week, CNS upgraded the PISA to a positive USQD, due to an increase in the probability of an accident previously evaluated in the facility's DSA. The protective cap is only used during disassembly of units with a specific Detonator Cable Assembly issue. CNS paused operations on specific units that might require this protective cap to be applied. CNS submitted the Evaluation of the Safety of the Situation (ESS) to the NNSA Production Office (NPO) recommending that operations be allowed to resume with no operational restriction. The ESS stated that there is no change in the process or controls, and that the DSA needed to be revised to credit the Sylgard™ used to secure a protective cap.

PISA for ESD Scenario Associated with Army-Navy (AN) Containers: CNS declared a PISA when a Hazard Analysis Task Team (HATT) identified a potential issue with the use of AN containers when packaging a specific configuration. The HATT discovered that the material used in packaging did not prevent the ESD hazard to the configuration being packaged. CNS declared the PISA because ESD insults are not adequately captured in the hazard analysis. CNS declared this PISA on one weapon program; however the discovery was identified for two weapon programs. The second program is paused for another PISA related to the validity of the Weapon Response Summary Document, and this hazard will be incorporated into that PISA. (See reports for 2/27/2015 and 3/6/2015.) CNS has paused the packaging of these specific configurations into AN containers.

Explosives Limit Technical Safety Requirement (TSR) Violation: Last week, CNS declared a TSR violation when one facility exceeded the explosive limit by approximately four pounds of high explosives. The exceeded limit was discovered when the Move Right Administrator performed the daily query to verify the facility limits were not exceeded. CNS discovered that small amounts of explosives in the non-nuclear sections of bombs are not included in the facility inventory until the non-nuclear section is disassembled. The explosive limit was exceeded in a non-nuclear facility; however the TSR control limit still applies due to explosive hazards outside of the facility. CNS took immediate action to remove some of the explosives from the facility, placing the facility within the TSR control limit. CNS is planning to perform a Causal Analysis-Mistake Proofing meeting to determine the cause and corrective actions.