

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 23, 2014

MEMO TO: Steven Stokes, Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending May 23, 2014

Positive Unreviewed Safety Question (USQ) Determination for Unanalyzed Pressure:

Babcock & Wilcox Technical Services Pantex, LLC (B&W) declared a Positive USQ determination after receiving the weapon response from the Design Agency for pressure induced by the Sylgard™ pump. (See report for 5/16/2014.) The positive USQ determination stated that there was an increase in the consequence of an accident previously evaluated and an accident of a different type not previously evaluated. B&W sent a Justification for Continued Operation (JCO) to the NNSA Production Office (NPO). NPO responded with a letter stating that there was no immediate concern and no need for a JCO. B&W re-categorized the USQ to a negative USQ determination. Prior to B&W resuming operations, NPO sent a second letter withdrawing the first letter and instructed B&W to re-evaluate the USQ determination. B&W returned to the original positive USQ determination citing the same two reasons for why it was positive. B&W re-submitted the JCO to NPO. The JCO identifies compensatory measures such as initial testing of the air pressure gage at the inlet to the Sylgard™ pump and verification by the Production Technicians that the pressure is at the prescribed setting during nuclear operations. NPO issued a Safety Evaluation Report (SER) with a condition of approval to incorporate an independent verification of the pressure setting prior to Sylgard™ pump operations. B&W has incorporated the changes to the Nuclear Explosive Operating Procedures, performed training on the procedure changes, and resumed operations. B&W stated in the JCO that they plan to implement a pressure relief device between the Sylgard™ pump and the unit. The JCO will expire in 120 days.

Integrated Program Planning and Execution System (IPRO) Discrepancy: While performing an inventory in Zone 4, B&W Transportation personnel discovered a discrepancy between the physical location of three Joint Test Assembly units and the location identified in IPRO. The units arrived at Pantex about the same time as the IPRO cut-over in August of 2013. The location of the units was input into IPRO when they arrived on site. Transportation personnel placed these three units in a different facility due to physical space constraints, and never updated the IPRO system. Since the discovery, the IPRO data has been corrected. The material limits for these facilities were not exceeded and there was no Technical Safety Requirement violation. B&W has revised the transportation procedure to incorporate a second check on placement of material.

Suspect/Counterfeit Vendor Documentation for DOT 7A Containers: A B&W Packaging Engineer discovered a discrepancy between the bolt torque specification supplied by the container vendor and those used during certification testing of the container. These containers are used for off-site shipment of radiological material. B&W paused all off-site shipments involving these containers and is regarding the vendor-provided documentation as suspect/counterfeit.

Hoist Failure: B&W Production Technicians (PTs) reported the failure of an ASME NUM-1 hoist during their pre-operations check. The hoist failed to move up because the upper limit switch was stuck in the closed position. The PTs noted some damage to the wire attached to the limit switch which prevented the switch from opening.