

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 29, 2014

MEMO TO: Steven Stokes, Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending August 29, 2014

Positive Unreviewed Safety Question (USQ) Determination for Sylgard™ Pump:

Consolidated Nuclear Security, LLC (CNS) upgraded the declared Potential Inadequacy of the Safety Analysis on the toppling of the Sylgard™ pump due to a seismic or falling man event to a positive USQ determination. (See report for 8/22/2014.) CNS discovered that the Sylgard™ pump did not meet the functional requirements for toppling due to a seismic and/or falling man event when the pump is in the “up” configuration with drum of the pump sitting on the manufacturer’s attached cart. CNS had evaluated toppling of the Sylgard™ pump only in the “down” configuration, when the drum of the pump is sitting on the floor. However, there was no control requiring the pump to be in the ‘down’ position when it is positioned next to the work stand and is in use. CNS sent an Evaluation of the Safety of the Situation (ESS) to the NNSA Production Office (NPO). The ESS credited the Control of Equipment and Tooling Specific Administrative Control (SAC) that requires certain freestanding equipment including the pump, not intended to dock with the assembly stand, to approach the assembly stand from the side. Approaching from the side ensures the vertical supports of the assembly stand can prevent an impact to the unit. The SAC has a second list that requires certain equipment, not including the Sylgard™ pump, to remain positioned to the side of the assembly stand during use. NPO sent a Safety Evaluation Report approving the ESS, with a compensatory measure requiring CNS to add the Sylgard™ pump to the list of equipment required to be positioned to the side of the assembly stand during use.

Pause in Operations Due to a Tooling Problem: CNS paused operations in one facility when the production technicians (PTs) noticed the unit in the work stand was leaning more than anticipated. The PTs lowered the unit into a piece of tooling sitting on the base of the work stand to establish a safe and stable configuration. CNS is writing a nuclear explosive engineering procedure to remove one of the tools that is being used to mate the unit to the work stand. The engineers plan to evaluate the tool, replace it and resume operations. CNS tooling and process engineers will evaluate and determine the cause of the problem.

Continuous Air Monitor (CAM) Failed Planned Maintenance: CNS placed one facility into maintenance mode and restricted access when the CAM failed the planned maintenance. The CAM failed to annunciate within the facility even though it did send a signal to the radiation safety facility and the operations center. CNS plans to replace the CAM.

Blast Door Interlock (BDI) Limiting Conditions for Operation (LCO): This week, there were several instances where CNS entered the appropriate LCO for BDI problems. In most of these instances, CNS crafts personnel simply reset the circuit breaker. In one instance, the LCO was entered to facilitate replacing the filter on the radiation air monitor system. In another instance, facility personnel had inadvertently hit the BDI override while exiting the facility. One facility was placed into maintenance mode when the ARGUS security system would not recognize that the BDI was actually working. CNS ARGUS subject matter experts were sent to the facility to resolve the problem.