

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 12, 2014

MEMO TO: Steven Stokes, Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending December 12, 2014

Technical Safety Requirement (TSR) Violation for a Material Move: Consolidated Nuclear Security, LLC (CNS) declared a TSR violation for a move of high explosives that had not been authorized. The TSR states that the Pantex Material Move System is used to authorize moves of this type of explosives. Plant personnel selected six items to be moved using the “pick batch” feature in the material move application in the Integrated Program Planning and Execution (IPRO) system. The person planning the move noticed that each of these items was packaged in a container with other track-able items and prepared additional paperwork to move these items. After the manager checked both the original pick-batch list and the additional paperwork, the person dispatching the items processed the paperwork in IPRO to authorize the move. However, the person dispatching the items missed one of the items on the original pick-batch list. The receiving facility was not able to receive the item until it had been dispatched in IPRO. CNS will be performing a causal analysis-mistake proofing meeting to determine the cause and any corrective actions.

This was the third TSR violation since CNS implemented a compensatory measure requiring a manager check that the material listed on the paperwork matches the material being moved. (See reports for 9/19/2014 and 11/7/2014.) The Site Representative observed an IPRO material move demonstration given by CNS to the NNSA Production Office (NPO) Facility Representatives. At the demonstration, CNS subject matter experts showed that the manager check is performed before the move is actually authorized. In this event, the paperwork the manager checked was correct, but the error occurred at the next step; move authorization. They also demonstrated that the pick-batch method is one of five different material move transaction types, and the general complexity of performing material moves.

Potential Inadequacy of the Safety Analysis (PISA) for Electro-Static Discharge (ESD)

Scenario: CNS declared a PISA when they were notified by the Design Agency for one weapon program that an anodized coating on one component in the static dissipative path may challenge the dissipative control requirements in the safety basis. The Design Agency identified the concern on December 2, 2014, while performing a Hazard Analysis Task Team (HATT) walk down for a new process. The Design Agency sent an Information Engineering Release (IER) to Pantex on December 9, 2014, informing them of the new information related to weapon response and how the ESD hazards are controlled for this weapon program. The Design Agency did not convey new weapon responses information in the IER. CNS stated in the PISA form that the new information indicated that administrative controls may not provide the mitigation or prevention credit assigned to them in the safety basis. The specific administrative control CNS declared the PISA on is the implementation of the 100 volt static dissipative environment. CNS paused all operations on this weapon program.

Pause in Operations due to Tooling Failure Update: CNS heard from the manufacturer of the sprag clutch that the clutch met their specifications when bench tested. The manufacturer has not yet disassembled and inspected the clutch. (See report for 12/5/2014.) Operations utilizing this work stand remain paused.