

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 7, 2014

**MEMO TO:** Steven Stokes, Technical Director  
**FROM:** Thomas Spatz, Pantex Site Representative  
**SUBJECT:** Pantex Plant Report for Week Ending November 7, 2014

**DNFSB Staff on Site:** T. Dwyer was at Pantex this week to observe the Assistance Deputy Administrator for Stockpile Management (NA-12) Senior Management Team meeting.

**Technical Safety Requirement (TSR) Violation:** Last week, Consolidated Nuclear Security, LLC (CNS) declared a TSR violation for a move of accountable nuclear material that had not been authorized. The TSR Specific Administrative Control states that authorization is required prior to initiating a move; and the Integrated Program Planning and Execution (IPRO) system is used to authorize moves by verifying that the move windows are correct and that the facility inventory limits will not be exceeded. Although the move windows and facility inventory were correct at the time of the move, the TSR violation occurred because there was no verification by IPRO. The Production Technicians (PTs) planned four material moves in the IPRO system to go to different locations. The PTs submitted the move and received authorization in IPRO to move one of the items and moved the wrong item. The IPRO subject matter expert corrected the data so that the material could be accepted in the facility. This was the second TSR violation since CNS implemented a compensatory measure requiring manager verification that the material listed on the paperwork matches the material being moved. (See report for 9/19/2014.) Following the event critique, CNS management initiated a stand-down of all material moves until employees were briefed on the importance of material moves on plant.

**Material Move Event:** CNS experienced another move event several days prior to the TSR violation mentioned above. In this event, five items were simultaneously dispatched and moved from a loading dock to a staging facility. Two of the items were mistakenly taken to the facility adjacent to the staging facility. The PTs discovered the problem when they were verifying the facility inventory to ensure custody was completed successfully. This did not result in a TSR violation because the moves were authorized, the move windows were correct, and the facility inventory limits were not exceeded. CNS is handling this event in their Problem Evaluation Request system.

**Potential Inadequacy of the Safety Analysis (PISA) and Positive Unreviewed Safety Question (USQ) for Electro-Static Discharge (ESD) Scenario:** CNS Tooling Engineers identified a discrepancy with the ESD requirements while developing a modification to the existing Sylgard™ pump to close an open Justification for Continued Operations (JCO). (See reports for 5/23/2014 and 9/12/2014.) CNS Facility Engineering personnel performed physical measurements (capacitance) of the existing Sylgard™ pump when the pump was on the attached wheel assembly, and when the drum was placed on the floor. CNS declared a PISA when they discovered that the physical ESD measurement of the Sylgard™ pump exceeded the threshold capacitance value given in one weapon program Hazard Analysis Report (HAR). CNS upgraded the PISA to a positive USQ due to the increase in the consequence of an accident previously evaluated in the weapon HAR. CNS has submitted a revision to the existing JCO. The revised JCO credits the conductivity of the Sylgard™ pump nozzle and the fact that it is only used when held by a PT who is part of the conductive pathway to ground. CNS will add an acceptance requirement to the Sylgard™ pump nozzle design feature.