

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 13, 2013

MEMO TO: Steven Stokes, Technical Director
FROM: Thomas Spatz, Pantex Site Representative
SUBJECT: Pantex Plant Report for Week Ending December 13, 2013

DNFSB Staff on Site: R. Arnold, P. Foster, and A. Gwal were at Pantex this week to perform an electrical distribution system review.

Anomalous Unit Nuclear Explosive Safety Change Evaluation (NCE): The National Nuclear Security Administration (NNSA) performed an NCE this week to approve transportation of the anomalous unit to and from a radiography facility, and to perform the radiography. Babcock & Wilcox Technical Services Pantex, LLC (B&W) has paused operations in one facility since late February 2013 due to this anomalous unit. (Key reports for the anomalous unit are from 3/1/2013 and 4/26/2013.) Over the past several months, B&W has developed a new stabilizer tool and a new transfer cart to transport the unit to and from the radiography facility. B&W plans to obtain a clear weather window for the move and pause all traffic, including personnel traffic, along the transportation route during the move. B&W has submitted a Justification for Continued Operation (JCO) to NNSA Production Office (NPO) to perform the operations. In the JCO, B&W assumed all weapon response values were anticipated, and implemented controls for every hazard. Sandia National Laboratories provided an Engineering Authorization to verify that the transported configuration provided a Faraday cage, and Los Alamos National Laboratory provided an Engineering Authorization to direct B&W on which radiographs to perform. The NCE report was not available in time for this weekly report.

Paused Operations due to Tooling Concern: B&W paused operations on one weapon program when a spring-loaded handle, attached to a plate fixture, became disengaged from the plate securing it and flew several feet above the unit. The Site Representative and the NPO Facility Representative went to the facility to discuss the event with the B&W Production Manager and the Production Technicians (PTs). The PTs stated that the handle almost flew high enough to hit the lights, and landed on the work stand approximately one foot from the unit. The tool design does not preclude the handle from coming loose, but it is usually controlled by the PT during use. There were two B&W Nuclear Explosives and Surety personnel in the facility when the event happened, and they notified the appropriate people to pause the operation. B&W has not held an event critique yet and is still evaluating the event. B&W has tagged out the tool.

Work Stand Failure: B&W paused nuclear explosive operations in one facility this week when the Production Technicians had difficulty raising and lowering the trunnions of the work stand. B&W has written a Nuclear Explosive Engineering Procedure to add an already removed component to the unit so that the unit can be rotated, placed on the appropriate H-gear, and removed from the work stand. B&W Tooling Warehouse personnel will then evaluate the work stand.

Integrated Program Planning and Execution System (IPRO) Material Move Event: B&W PTs dispatched two material moves from their facility to a Special Nuclear Material (SNM) facility. The SNM facility was not able to receive one of the moves. The PTs performed all the necessary procedures and IPRO gave authorization for the move. B&W is still evaluating the event to find out why the move could not be accepted at the SNM facility.