

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 10, 2015

TO: S. A. Stokes, Technical Director
FROM: Michael Dunlevy, Acting Pantex Plant Site Representative
SUBJECT: Pantex Plant Weekly Report for Week Ending April 10, 2015

Update: Pause in Operations due to Weapon Response Validity: Consolidated Nuclear Security, LLC (CNS) paused operations on February 20, 2015, and declared a Potential Inadequacy of the Safety Analysis (PISA) on March 2, 2015, for one weapon program due to new information concerning the validity of Issue B of the Weapon Response Summary Document. (See reports dated 2/27/2015 and 3/6/2015 for more information.) On April 1, 2015, Los Alamos National Laboratory (LANL) sent an Information Engineering Request to Sandia National Laboratories (SNL), and on April 3, 2015, SNL sent a Final Change Order (FCO) to CNS documenting “the formal LANL review of, and concurrence with,” Issue B of the Weapon Response Summary Document. The FCO also states that “[t]he next release of the Weapon Response Summary report, Issue C, will incorporate additional changes or modifications made in the internal ESD [Electrostatic Discharge] weapon response.” The FCO addresses the initial PISA; however, operations remain paused for this weapon program due to two additional unrelated potential inadequacies regarding ESD that are not formally documented in the CNS new information process.

PISA Process: On April 9, 2015, NNSA Production Office (NPO) transmitted a letter to CNS regarding issues associated with the CNS PISA process that cites the handling of issues associated with the weapon program discussed above as an example. The letter states, “There have been recent issues associated with the [PISA] process related to PISA declarations, timely updates, consistency of documentation, and linkage of issues.” The letter requests CNS to complete a series of actions to address the handling of issues associated with the specific weapon program discussed above and to “provide NPO with a plan and schedule detailing actions to improve the PISA process by May 15, 2015.”

Update: The Falling Man Hazard: In response to the June 2, 2014, Board letter on concerns regarding falling man scenarios and special tooling at the Pantex Plant, CNS installed a number of controls in selected nuclear explosive cells as a process improvement to help prevent and mitigate the falling man hazard. The acting Pantex Plant site representative walked down these cells, and noted the following improvements: an installed aid on the floor requiring personnel approaching a weapon unit to ask for permission to enter; an installed aid denoting an appropriate standoff distance between the weapon unit and personnel observing operations; beveled floor mats that helps prevent tripping; and revised procedures that change the height at which some weapon operations are performed, which would reduce the force that a falling man could apply to the weapon unit.

Atmospheric Dispersion Calculations: Members of the Board’s staff held discussions with CNS and NPO personnel in August 2014 and January 2015 regarding potentially deficient atmospheric dispersion calculations used to determine the consequences of an accidental radiological release in the Pantex Plant safety basis. During the staff’s review, CNS stated that they were preparing a plan for a comprehensive review of all legacy dispersion calculations. On April 7, 2015, NPO transmitted a letter to CNS requesting CNS evaluate the current dispersion analyses for update and/or revision, and to provide a plan and schedule of this evaluation within 30 days.