

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 26, 2020

**TO:** Christopher J. Roscetti, Technical Director  
**FROM:** Miranda McCoy, Resident Inspector  
**SUBJECT:** Pantex Plant Activity Report for Week Ending June 26, 2020

**Safety Basis:** Late last week, CNS safety analysis engineering personnel declared a potential inadequacy of the safety analysis (PISA). During a review of the hazard analysis report (HAR) for a specific weapon program, CNS determined that multiple scenarios included incorrect parameters. The errors affected both electrical and mechanical hazards present during installation and removal of a protective cover on a specific unit configuration. As an operational restriction, CNS applied an existing specific administrative control (SAC)—the personnel evacuation SAC—to the affected operations. CNS recently posted a revision to the Pantex unreviewed safety question procedure that outlines an additional category of actions to support continued operations, similar to operational restrictions, that NNSA has pre-approved for use. Among the pre-approved actions are implementation of bonding schemes, installation of protective covers, and implementation of the personnel evacuation SAC for low-order consequence events.

**Emergency Management:** The resident inspector attended an emergency management agreement-in-principle (AIP) meeting. AIP meetings allow NPO and CNS personnel to meet with local government officials and relevant state agencies to discuss emergency exercises, community outreach, and emergency response planning. While typically held quarterly, COVID-19 related concerns resulted in the cancellation of the previously scheduled AIP meeting, so the group has been unable to meet since late last year. Among other topics, participants presented information on site and community COVID-19 response, NPO and CNS personnel changes, and plans for upcoming emergency exercises.

**Facility Structure:** During an annual in-service inspection (ISI) of the safety class facility structure, the systems engineer noted concrete spalling high on the wall in one ramp. The damaged concrete extends approximately two feet by one foot as viewed on the surface of the wall, and is located at the anchorage point for an I-beam spanning the width of the ramp. While CNS does not believe the damage would affect the structure of nearby nuclear explosive bays, the affected ramp is included in authorized transportation routes for nuclear explosive configurations. Immediately following the identification of spalling, system engineers made appropriate notifications to the facility representative and facility engineering manager and noted the damage in the ISI documentation. CNS personnel subsequently barricaded the area to both foot traffic and nuclear explosive configuration transfers. CNS personnel are pursuing actions to evaluate the extent of the damage, and determine necessary actions to allow transportation to resume through the affected ramp. In order to investigate the concrete damage further, particularly if destructive evaluation is necessary, the I-beam with the affected attachment area would likely need to be braced or supported. The previous year's ISI did not document any similar damage or spalling in the affected area; however, damage could have been obscured by paint. Additionally, CNS personnel could not determine any singular event within the past year that would be expected to cause significant spalling. CNS determined that the event constitutes a degradation of a safety class structure, system, or component while required to be operable.