

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 9, 2021

TO: Christopher J. Roscetti, Technical Director
FROM: Mark Bradisse and Christopher Berg, Acting Resident Inspectors
SUBJECT: Pantex Plant Activity Report for Week Ending July 9, 2021

Readiness Assessment: CNS concluded demonstrations for the contractor readiness assessment for a certain weapon program (see 6/11/21 report). The resident inspector observed a demonstration of the receiving and inspection process.

Justifications for Continued Operations (JCO): Board Recommendation 2019-1 identified concerns with the timeliness in dispositioning JCOs at Pantex, finding that some JCOs were in effect for multiple years without updating the associated safety basis document. In response to the Recommendation, NNSA committed to revise Pantex procedures to require NPO concurrence with any JCOs that are unable to be archived within a year of initial approval. NPO and CNS have since completed these activities. Last week, CNS requested a two-month extension to three JCOs, which are set to expire in August, for the same weapon program. These documents—in addition to a fourth JCO—account for and control hazards, including mechanical impact and electrostatic discharge scenarios resulting from charge generation (see 3/19/21 report). The additional time will allow CNS to archive the JCOs, incorporate them into the documented safety analysis, and verify implementation after completion of readiness activities.

Nuclear Explosive Safety (NES): A NES study group conducted a training session for an upcoming NES study pertaining to disassembly of units for a different weapon program. This study will first apply to disassembly of a specific unit with a damaged component, and will then be more broadly applied to the program as a whole, to allow disassembly operations of any unit from that program with similar damage to that component. Both resident inspectors participated in this training session.

In-Service Inspections (ISI): This week, NPO issued a safety evaluation report approving a safety basis supplement (SBS) for two pieces of installed special tooling for a different weapon program. One of the pieces of tooling is past the 25% grace period for its annual ISI (see 6/11/21 report); the other is past its annual ISI date but still within the allowed grace period. CNS submitted the SBS to request use of these tools for one final lift and transfer activity, after which the tools will be tagged out of service and delivered to the tooling warehouse to allow performance of the ISI. CNS determined that there would be no degradation in the tools' abilities to perform their required safety functions between now and the time when the tools would be tagged out of service. NPO approved the SBS with no conditions of approval.

Last week, NPO approved an SBS to allow continued staging of a certain unit in an enhanced transportation cart beyond the cart's ISI grace period. The unit is awaiting facility and production technician availability to continue its processing. CNS noted that there will be no degradation of the design features of the cart over this extended duration due to the climate-controlled facility and minimal anticipated movement of the cart. NPO submitted no conditions of approval against the SBS but limited the duration of the staging activities in this cart to its upcoming annual ISI at the end of this year.