DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 18, 2021

TO:Christopher J. Roscetti, Technical DirectorFROM:Mark Bradisse and Christopher Berg, Acting Resident InspectorsSUBJECT:Pantex Plant Activity Report for Week Ending June 18, 2021

Readiness Assessment: CNS continued the contractor readiness assessment for a certain weapon program (see 6/11/21 report). The resident inspector observed demonstrations of disassembly operations this week.

35-Account Material: Earlier this month, production technicians (PT) used a kit of 35-account material to perform repair operations on a component. The next day, PTs noticed that the kit label in the waste stream indicated that the kit had expired prior to use. The following morning, the PTs contacted the production section manager (PSM), who made appropriate notifications and initiated the non-conform process for the component.

During the event investigation, it was determined that while performing inventory activities the prior week, a different group of PTs had identified one of the kits in a flammable storage locker as expired; however, rather than remove the kit, they segregated it within the locker from unexpired kits of the same material. They did not further mark or denote the expired kit as such (i.e., they did not apply a do-not-use tag to the kit). The investigation further determined that the procedure in which the kit was used did not include steps to record the kit's lot number or expiration date. CNS identified corrective actions to brief personnel on the importance of prompt notifications, of placing do-not-use tags on expired 35-account material, and of removing expired material from the facility.

Expired Special Tooling: During imaging operations earlier this month, PTs used expired special tooling in a nuclear facility. Specifically, the preventive maintenance expiration date for the special tooling had been exceeded by a few days. At the event investigation, participants noted that the expired special tooling had been used on three separate occasions during special nuclear material operations. Typically, PTs inspect special tooling prior to use to identify excessive wear or damage and verify that the tooling has not expired. Participants at the event investigation indicated that tooling had not been inspected prior to use, and therefore had not been tagged as out of service. Following the third set of operations, PTs identified the issue and notified their PSM, who paused these specific activities and made appropriate notifications. Additionally, the PTs tagged out the special tooling, preventing further use until the preventive maintenance is completed.

At the investigation and critique for this event, CNS personnel identified that newer PTs involved in these operations had not received PSM briefings—which had been provided the previous year—specific to verification of special tooling identification and markings. As a corrective action, CNS will provide a briefing to involved PTs on tooling verification expectations, general use place keeping, and requirements for pre-shift setup operations. Also, CNS will conduct a further briefing with all special nuclear material personnel, including newer PTs, on the procedure governing weapon assembly and disassembly operations requirements.