

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 8, 2025

TO: Technical Director
FROM: Oak Ridge Resident Inspectors
SUBJECT: Oak Ridge Activity Report for Week Ending August 8, 2025

Building 9720-5: YFO prepared a safety evaluation report addendum for the approval of a justification for continued operation (JCO) and evaluation of the safety of the situation to address a potential inadequacy in the safety analysis (PISA) associated with pyrophoric material hazards within Building 9720-5. As a result of numerous drums of depleted uranium chips being stored in the building in an unanalyzed condition, YFO approved the JCO based on modifications to operational restrictions implemented to address the Unreviewed Safety Question (USQ) (see 5/2/2025 report). In addition, YFO provided technical direction in the approval letter requiring CNS to resolve the USQ within one year by either removing the materials subject to the JCO or submitting a safety basis change formally incorporating analysis of the material into the Building 9720-5 safety basis. This direction was prompted by CNS having three existing JCOs with targeted cancellation dates of more than one year, and three other JCOs, including this one, with no targeted cancellation dates.

Building 9204-2E: Construction personnel removed a temporary modification to a ventilation duct while completing the tie-in of a new piece of ductwork without following the proper change control process. During the event investigation, CNS determined that the construction personnel and the on-shift shift manager did not adequately communicate the full scope of the work to be performed. The construction superintendent assumed that by telling the shift manager that they intended to perform a tie-in on the existing system, the shift manager would realize the temporary ductwork would be removed and replaced with the permanent ductwork. Although the system was installed according to the approved design documentation, the temporary modification process was not followed during removal of the temporary ductwork. This included removal and return of a temporary modification tag that was attached to the temporary ductwork. CNS intends to evaluate revising the procedure governing temporary modifications as they relate to construction activities. Following the investigation, the resident inspector asked the shift manager about the amount of work they observe while on shift. This evolution was performed on a weekend when there is little activity in the shift manager's office. While the experience level of personnel differs between the facilities, CNS does have a floor time policy that requires shift managers to spend a minimum of 20 hours a month observing work or supporting activities. This floor time is beneficial to the shift manager's understanding of their facility and, subsequently, the work they are authorizing.

As for other activities within the building, Facility Operations Management (FOM) completed all but one zone of detector probe surveillance testing for the recently installed, yet not operational, new criticality accident alarm system. Of the 10 zones, one zone—consisting of three probes—was left untested so FOM could demonstrate that portion of the procedure for the follow-on implementation verification review (IVR) scheduled for next week. During the initial IVR, CNS identified several procedural weaknesses that did not allow verbatim compliance (see 10/18/2024 report). The recent procedural practice, including probe testing and power supply testing, proved the procedure revisions have improved the flow of the work, allowing for verbatim compliance.