**DEFENSE NUCLEAR FACILITIES SAFETY BOARD**

March 28, 2025

**TO:** Technical Director
**FROM:** Oak Ridge Resident Inspectors
**SUBJECT:** Oak Ridge Activity Report for Week Ending March 28, 2025

**Building 9202:** A resident inspector (RI) attended the critique of an event investigation held due to the misapplication of Lockout/Tagout (LOTO) requirements. The Uranium Processing Facility calciner is currently undergoing testing and evaluation within the Y-12 development Building 9202. Maintenance workers utilized a work order to complete a calciner tube replacement to enable further testing and evaluation of the system. Workers completed the tube replacement, returned the calciner to service, and initiated post maintenance testing (PMT). A development engineer stopped the PMT after observing excessive motor current and hearing an unexpected noise near the inlet of the calciner.

The supervisor, workers, engineers, and technical resource personnel discussed repair activities required due to the issues experienced during the PMT and the applicability of LOTO to those activities. They decided that a LOTO would only be required if the removal of the chain guard, located near the inlet, occurred while rotating equipment hazards existed. Work on stationary components could be performed without a LOTO. The descoping of which work required a LOTO was contrary to the work package, which made no distinctions regarding work conditions or hazards and stated only that a LOTO is required during maintenance. The work instructions contained direction to return to a procedural step in the work package if the PMT failed, which would have directed the reapplication of the LOTO. The PMT instructions did not specifically identify failure criteria, only acceptance criteria and, as a result, the workers did not recognize that the PMT had failed. Workers completed the troubleshooting and repairs under the work package PMT instruction, instead of failing the PMT and returning to the work package instructions. Electricians, outside machinists, and pipefitters completed work on the stationary section of the calciner and then the LOTO was implemented to perform work on the inlet side of the calciner, near the rotating equipment hazard. When pipefitters returned to perform work on the inlet side of the calciner, they did not apply their personal locks to the LOTO, contrary to the requirements.
The facility shift manager identified the LOTO issue during routine field oversight activities. CNS experienced a similar event in which an in-field determination was made that certain workers were not required to apply their personal locks to the LOTO due to the nature of the hazards present, despite the work package requiring a LOTO (see 6/7/2024 report). In that event, an RI identified the issue while conducting routine field oversight activities. CNS created several corrective actions in the event investigation to address the underlying issues in the event.

**Building 9212:** Previously, a Building 9212 shift manager identified a high-capacity evaporator surveillance exceeded the due date and allowable grace period. CNS created formal actions within the building and communicated the issue to other facilities. An RI provided feedback that creation of a formal action to drive resolution of the issue within the other facilities would be beneficial (see 3/21/2025 report). In the RI's opinion, a formal action enables formal tracking of the issue and requires closure evidence, thereby ensuring the issue is completely resolved. This week, CNS created additional formal actions to track the issue resolution in other nuclear facilities based on the RI's feedback.