

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 27, 2026

TO: Technical Director
FROM: Oak Ridge Resident Inspectors
SUBJECT: Oak Ridge Activity Report for Week Ending February 27, 2026

Uranium Processing Facility (UPF): A resident inspector (RI) and the YFO readiness manager performed a walkdown of the UPF Main Process Building and the UPF Salvage and Accountability Building. The YFO readiness manager and the RI discussed several aspects of the UPF project during the walkdown, including YFO facility representative training and qualifications, project progress, system configurations, readiness activities, and casting operations.

Building 9204-2E: An RI observed the pre-job briefing and the first CAAS-3STM detector probe replacement. CNS discovered the detector had failed approximately four months ago and delayed the replacement to allow the maintenance crew flexibility in scheduling the work due to only one of the three detectors not working (only one probe is required to be operable). After a review of the paperwork, the RI discovered an inconsistency in the way the work instructions identified the replacement probe. The work instructions identified the probe as number two, but the procedure to replace it identified the probe as number five. The RI notified the system engineer and operations manager of the concern; however, they decided that based on the expert knowledge of the system engineer and the lack of risk to the operability of the system, work would continue. After further questioning by the RI regarding the use of verbal directions to work on a safety significant system, the workers paused the work to address the procedural issue. The shift technical advisor discussed the issue with the RI and noted the locational description on the work order linked the as-built probe number to the descriptive noun used in the work instructions. The RI acknowledged the connection, and CNS resumed work. As written, the work order could not be performed without technical interpretation. The RI also commented on improvements to the procedure to the operations manager, shift technical advisor, and system engineer. The shift technical advisor committed to follow up on the RI's comments with the system engineer and suggest edits to the procedure.

Building 9212: CNS is investigating the cause of a fire in an electrical panel that occurred during maintenance. Electricians began troubleshooting a casting furnace electrical cabinet. While operating each electrical tap in the cabinet to test for correct operation, an electrician observed smoke emanating from the casting furnace capacitor cubicle. The electrician pressed the emergency stop button immediately, then shortly afterward a small flame appeared on top of the furnace capacitor cubicle. An electrician applied two pinches of carbon nanospheres, which extinguished the flame. The production supervisor reported the fire occurrence to the shift manager who called the fire department. The fire department responded, verified the fire to be extinguished, and released the scene back to the facility management. The electrical source was secured by building personnel, and electricians applied a lockout/tagout to the affected equipment. CNS held an event investigation and filed an occurrence report for a fire within a nuclear facility. The furnace remains on hold, pending repair. CNS is further evaluating the failure mode of the components and vulnerability of other furnaces to a similar failure mode.