DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 21, 2026

Oak Ridge Resident Inspectors Activity Report for Week Ending August 21, 2026

Building [redacted]: A resident inspector (RI) attended an event investigation for a small fire that occurred in a glovebox earlier this week. Chemical operators were performing [redacted] operations to remove a coating from [redacted] material in a glovebox when workers observed a fist-sized flame on an adjacent fire-retardant glovebox ventilation filter, which subsequently self-extinguished. Per the job hazard analysis (JHA), a fire watch is required to observe the work during this operation due to the sparks produced from the [redacted] Upon identification of the fire in the glovebox, fire watch personnel stopped the work but did not call 911 as trained and instead notified the supervisor. The supervisor also failed to call 911 and instead notified the shift technical advisor who called 911 resulting in the fire department response. The RI identified that CNS could not adequately discuss the gaps in response actions during the investigation due to CNS failing to have the work team present. CNS's proposed corrective actions include having a fire protection engineer determine the cause of the fire and reviewing the JHA to include fire response actions.

Later in the week, an RI observed an evacuation drill that involved operators responding to a simulated fire. The operators participating in the simulated fire drill did not ask the controller how big the fire was or where it was located and instead immediately evacuated the facility. After evacuating the facility to the assembly station, the operators did not call 911 or attempt to initiate accountability until prompted. Prior to the drill, the drill controller noted a table blocking the emergency exit and that the egress path on the outside of the exit was cluttered with items that could have been tripping hazards. Combined with the issues from the actual fire response earlier in the week, personnel from the facility show a weakness in fire response training.

[redacted]**:** Previously, the NNSA Y-12 Project Management Office directed the [redacted] project to accelerate the demonstration of the [redacted] capability and cast an [redacted] uranium [redacted] part by September 30, 2028 (see 03/06/2026 report). On March 23, 2026, YFO received approval from the NNSA Associate Administrator for the Office of Environment, Safety, and Health to exempt the casting demonstration from the consideration of the potential for nuclear criticality events criteria contained in DOE-STD-1027-92, *Hazard Categorization of DOE Nuclear Facilities,* for determining the hazard categorization of the facility. Although CNS was exempted from these criteria, CNS would still be required to ensure that a nuclear criticality safety program and nuclear criticality safety evaluations are in place to ensure the demonstration will remain subcritical under normal and credible abnormal conditions. In addition, NNSA issued new direction to CNS to utilize material not subject to the same nuclear criticality requirements as [redacted]. The RIs will continue to follow changes to the project resulting from the early casting direction.