DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 1, 2025

TO: Technical Director

FROM: Oak Ridge Resident Inspectors

SUBJECT: Oak Ridge Activity Report for Week Ending August 1, 2025

Staff Activity: The Associate Technical Director for Field Operations (ATD-FO) traveled to Oak Ridge this week. The ATD-FO and Resident Inspectors (RIs) conducted walkdowns of Buildings 9204-2E, 9212, 9215, and the Uranium Processing Facility (UPF) at the Y-12 National Security Complex (Y-12). During the walkdown of 9212, the ATD-FO and an RI identified an enclosure that created an unsprinklered area. The ATD-FO and RI reported the condition to the shift manager, who entered a Limiting Condition for Operation until operability of the system could be determined. The ATD-FO and the RIs also conducted walkdowns of Buildings 2026, 3019, and the Transuranic Waste Processing Facility at Oak Ridge National Laboratory.

Building 9202: A legacy material in the foundry storage area sparked and glowed when a development worker placed and flipped the material in an open-top pan. A development worker immediately applied carbon microspheres to smother the material and notified the Fire Department (FD). After an initial assessment of the scene and a thermal reading of the coke, the FD determined the scene was stable. Additionally, CNS monitored the material for 24 hours to ensure it was stable. During the event investigation, an RI noted that FD personnel were in respiratory protection during the FD's initial response, but the development personnel entering the area to open secure doors were not. CNS determined the underlying cause of the issue was that radiological control personnel were not notified of the event when it occurred.

Building 2026: Isotek filed an occurrence report for an uncontrolled hazardous energy source in an out-of-service electrical panel. A subcontractor electrician was demolishing a legacy electrical panel for planned upgrades in the facility, which involved cutting and removing a large amount of internal control wiring. The electrician checked for the absence of voltage using a non-contact voltage test instrument that produced no indications of power. The electrician began cutting into a 120 VAC wire when he observed a spark and a popping sound; the electrician was not injured. Isotek personnel later determined that the wire was fed from an alternate energy source that had been improperly routed. During a critique of the event, Isotek assigned an action to create a team of subject matter experts to determine if further work controls can be instituted to reduce the risk from unknown electrical hazards in legacy equipment.

High Efficiency Particulate Air (HEPA) Filter Testing: DOE's Office of Nuclear Safety removed the provision requiring 100% inspection and testing of HEPA filters at the independent DOE Filter Test Facility (FTF), as required per DOE-Standard (STD)-3020-2015, Specification for HEPA Filters Used by DOE Contractors. The Office of Environment, Health, Safety and Security's analysis indicated that 100% independent testing of HEPA filters is duplicative of the Nuclear Quality Assurance manufacturer's process. As a result, the Y-12 Field Office issued a memo relieving CNS from the current requirement of 100% inspection and testing for HEPA filters at the independent DOE FTF. CNS is expected to continue taking appropriate actions to ensure future HEPA filter procurements are adequately evaluated per CNS's DOE-approved quality assurance program.