

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 27, 2026

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

Building 9212: A resident inspector (RI) attended two separate calciner procedure demonstrations that included performance drills to test the response of operators, supervisors, and other personnel during emergency or abnormal situations. The RI made several observations and provided feedback to CNS on procedures developed for the activity.

During the first drill, the RI observed the supervisor interacting with team members in a simulated high contamination area without being dressed in the appropriate anti-contamination clothing. The radiological technicians (RCTs) briefed the appropriate radiological work permits (RWPs) during the pre-job briefing, and the operators were dressed appropriately. During the second drill that occurred later in the week, the RI observed an operator wearing anti-contamination clothing without wearing anti-contamination gloves. This was not in accordance with either of the two RWPs that were briefed prior to the start of the drill. Also, one of the RCTs identified that a posting for an occupied airborne radioactivity area that was part of the drill did not have a “For Training Only” label on it and corrected it approximately 5 minutes after the drill started. Overall, drill performance was acceptable; however, CNS could improve how personnel and their level of participation in the drill area are identified, specifically drill controllers, observers, and participants. CNS requires personnel to wear identifying vests during sitewide emergency drills, and the pre-drill briefings state who will be participating and to what level their involvement will be included.

Upon review of the procedure, the RI observed that use of a torque wrench was required for a step, but there was no place to record the equipment identification number or calibration expiration date for the tool. In addition, the procedure contained “Caution” blocks with instructions not to overtighten the fasteners on a component. There was no further guidance or torque values listed for the component to prevent overtightening. During a discussion with CNS personnel, the caution blocks were inserted to alert operators to not overtighten a thumbscrew on a component and were unrelated to the torque wrench requirement. CNS is evaluating changing the caution block to a note.

Nuclear Safety: An RI reviewed the Building 9212 technical safety requirements (TSR) as part of routine oversight of the facility. While reviewing one of the appendices, the RI noted that the microwave casting hazard evaluation study (HES) and accident analysis (AA) were not referenced in the summary table or the TSR reference section, leading the RI to further investigate if the HES and AA had been properly incorporated into the TSR. The RI reviewed the two credited controls identified in the AA and found they had been properly incorporated into the TSR. The RI discussed the issue with CNS nuclear safety engineering, and it is unclear why these references were omitted in the TSR. CNS reviewed the safety analysis report and found the controls intended to protect the collocated workers had been properly incorporated. CNS created a formal action in the contractor assurance system to track this issue until the document updates can be completed.