

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 6, 2024

TO: Timothy J. Dwyer, Technical Director
FROM: Frank Harshman and Clinton Jones, Resident Inspectors
SUBJECT: Oak Ridge Activity Report for Week Ending September 6, 2024

Staff Activity: L. Lin, Savannah River Site (SRS) resident inspector (RI), traveled to Oak Ridge this week. The Oak Ridge and SRS resident inspectors performed walkdowns of Buildings 9204-2E, 9212, 9215, and the Uranium Processing Facility (UPF). In Building 9204-2E, the RIs observed glovebox machining operations, discussed building operations with facility operations management, and met with the YFO facility representative for the building. In Building 9212, the RIs performed a walkdown of casting operations. In Building 9215, the RIs' walkdown focused on electrorefining, machining, and the direct chip melt areas. The RIs reviewed nuclear criticality safety (NCS) postings against field conditions to verify compliance and discussed several existing NCS deficiencies during the walkdown. At UPF, the RIs met with personnel from NNSA Y-12 Acquisition and Project Management Office (APMO) and CNS to conduct a walkdown of the Main Processing Building and observe ongoing construction activities. During the walkdown, APMO and CNS discussed the progress made toward completion of the facility, project oversight activities, the obsolescence program, and design improvements over current control strategies in Building 9212. In addition to walkdown activities, the RIs met with YFO maintenance oversight and CNS maintenance planners to discuss current maintenance practices and work control challenges at Y-12. A CNS maintenance planner provided a briefing and demo of the work planning software used to generate work packages, which has been developed at Y-12. Overall, the RIs found the briefing informative and the SRS RI provided insight into the difference in maintenance practices between the two DOE sites.

Building 9720-5: An RI reviewed closure evidence in the contractor assurance system for the previous issues with the lightning protection systems for the facility (see 2/23/2024, 4/19/2024, 5/17/2024, and 5/31/2024 reports). In response to the identified issues, CNS assigned a corrective action to restore the system to code compliance. The issue owner uploaded a copy of the work order used to restore the system as closure evidence for the action. The RI discovered multiple conduct of operations issues with the work order including a quality hold point with a stop sign icon preceding it that stated "Quality Engineer/Quality Assurance: Ensure Ground Clamp has been installed and PMT objectives have been met" had been marked "not applicable" by the work group. The RI provided the results of the review to YFO and CNS. During YFO's review of the work order, several additional issues were discovered that were not compliant with conduct of operations and quality control requirements. Subsequently, YFO scheduled a walkdown with their lightning protection system subject matter experts to ensure the system had been restored to code compliance. CNS and YFO conducted a meeting later in the day to discuss the issues found and a path forward. The CNS director of technical assurance also gathered CNS subject matter experts to walk the system configuration down and placed access control on the roof of Building 9720-5. CNS plans to enter the issue into their contractor assurance system to fully review the work order and develop corrective actions to prevent recurrence.