

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 8, 2024

**TO:** Timothy J. Dwyer, Technical Director  
**FROM:** Frank Harshman, Resident Inspector  
**SUBJECT:** Oak Ridge Activity Report for Week Ending March 8, 2024

**Conduct of Operations:** The resident inspector attended an event investigation regarding the Building 9204-2E shift manager (SM) granting work start for a work package that was not fully approved via the CNS work planning process. The SM referenced the original work package approvals in the system and not the current revision pending approval. Craft personnel started work shortly after the SM granted work start. A shift technical advisor (STA) and the integration lead discovered the issue of the unapproved work package during a subsequent discussion. The STA informed the SM a revision to the work package was pending and the SM paused work. The work remained paused while personnel were completing the appropriate reviews, approving the revised work package, and the work steps already executed were evaluated against the approved revision. CNS identified two corrective actions during the event investigation: implement a system generated watermark on future work packages to clearly denote when it is not fully approved and ready to execute, and further evaluate the maintenance package approval process. In the resident inspector's opinion, automatically marking a work package as not ready for work is a more reliable control than relying solely on crew briefings and training.

**Nuclear Criticality Safety:** CNS previously discovered a legacy drum that contains Raschig rings and an unknown uranium-bearing material. CNS discovered the drum during walkdowns that focused on legacy items that may contain fissile material in Building 9212 (see 4/09/21 and 5/21/21 reports). CNS has worked to characterize and safety disposition the drum since its discovery (see 4/22/22, 9/23/22, and 12/2/2022 reports). CNS approved a procedure to specifically address the processing of the drum contents and has conducted several walk throughs and simulations to date. CNS intends to process the drum at its current location inside an engineered containment built specifically for processing this drum. The resident inspector attended the pre-job brief and field portions of the implementation verification review that CNS is performing prior to final approval to start processing the drum. The resident inspector did not observe any deficiencies with the activities conducted.

**NPO Oversight:** NPO issued the first triannual issues management meeting report for the 2024 fiscal year. No new management concerns, three emerging items of interest (EIIs), and one noteworthy practice were identified during this reporting period. One EII of note was CNS's management of utility systems and infrastructure. NPO identified several long-standing issues, such as maintenance of the plant boilers and water towers, that indicate a systemic problem with CNS's management of utility systems and related infrastructure. The NPO report stated that there are sufficient indications of major utility equipment and processes not being adequately managed by CNS. NPO concluded that the totality of these issues has increased site operational, environmental, and fire protection risks. The resident inspector discussed this issue with NPO management and will closely follow CNS's response to this issue.