

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 15, 2024

TO: Timothy J. Dwyer, Technical Director
FROM: Frank Harshman and Clinton Jones, Resident Inspector
SUBJECT: Oak Ridge Activity Report for Week Ending March 15, 2024

Building 9212: CNS conducted an event investigation for sampling performed outside the scope of a work package. Operators and support personnel were performing equipment clean outs as part of CNS's efforts to remove legacy equipment and reduce overall risk in the building. Operators cleaned out the legacy carbon burner system in the headhouse over the two previous days without incident. Operators were directed by a manager to remove a portion of the carbon burner's liner, which consisted of a mastic material, to sample for asbestos as the clean out progressed. The sampling of the liner was not within the scope of the work package and the operators were not qualified asbestos workers. The following day, an industrial hygiene technician, accompanied by chemical operators, obtained a sample from the carbon burner liner to test for potential asbestos. The event investigation team determined that the samples should be treated as fissile material. The shift manager (SM) found that the samples were not stored in an NCS-compliant storage location. The SM established an administrative boundary and entered CNS's procedure for abnormal condition involving fissile material. The SM contacted NCS personnel, who provided guidance for compliantly storing the samples. The SM rescinded the administrative boundary once the samples were NCS-complaint. CNS plans to conduct an additional event investigation focused on the sampling of potential fissile material without NCS controls.

Building 2026: The resident inspector (RI) observed operations in Building 2026 at the Oak Ridge National Laboratory. During the walkdown the RI discussed current and future operations with Isotek personnel. Isotek is currently implementing a revised safety basis which will permit the transfer of material between the separate division cells to enable greater flexibility in operations. The RI did not note any deficiencies on the walkdown.

Nuclear Quality Assurance: A NPO quality engineer performed a walkdown of a nuclear container refurbishment area with the CNS coordinator for suspect/counterfeit items as a follow up to the discovery of suspected counterfeit bolts being used in ratchet straps (see 10/27/2023 report). The NPO quality engineer inspected bolts in a cabinet at the worksite and discovered that the four packages of bolts had been checked out of approved storage for longer than the procedural allowance of ten days, with one package exceeding three years. CNS procedure E-PROC-3176, *Packaging, Shipping, Receiving, Storage, and Handling of Items*, Revision 002, states in part that "IF at the end of 10 calendar days the materials/items have not been used or installed, THEN return the materials/items to storage." During the event investigation, CNS did not understand what the issue was and did not identify any gaps until the NPO quality engineer asked how the area where the bolts were kept met the requirements for storage according to CNS procedures and why the parts were not flagged as nonconforming. During a break in the investigation, the RI asked if other parts located in the cabinet complied with the procedure and discovered the issue was wider spread than initially thought. CNS determined that the parts located in the cabinet in question are nonconforming and will write a technical justification to accept their use and confirm the quality of items that were previously assembled in the container refurbishment area.