

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 12, 2023

TO: Christopher J. Roscetti, Technical Director
FROM: Frank Harshman and Clinton Jones, Resident Inspectors
SUBJECT: Oak Ridge Activity Report for Week Ending May 12, 2023

Nuclear Criticality Safety: CNS issued a standing order to direct nuclear criticality safety (NCS) reviews of maintenance packages and increased oversight of maintenance activities within fissile control area boundaries in response to the recent NCS violations (see 5/5/2023 report). The standing order applies to all maintenance packages and maintenance activities being performed in specific buildings with defined fissile control areas. Criticality Safety Management & Integration is maintaining facility-specific spreadsheets to track reviews of all maintenance work throughout the facilities. These spreadsheets include reviews by Shift Technical Advisors, NCS Engineers, Infrastructure Planners, Criticality Safety Officers, Operations Managers, and Shift Managers. It is the Shift Manager's responsibility to ensure that the required oversight is available prior to work start being granted. The Disciplined Operations Specialists will provide the primary oversight by attending multi-disciplined pre-job briefings and verifying completion of pre-requisite NCS actions; their oversight also covers waste staging activities associated with the designated maintenance packages and activities. The resident inspectors discussed the implementation of the standing order with Shift Managers from multiple facilities to determine the level of familiarization and coordination amongst facility operations management personnel. Overall, personnel were well versed in the new requirements established and the resident inspectors will continue to shadow the implementation of these requirements as more fissile material handling activities resume. CNS management authorized the resumption of low-risk fissile material handling in most facilities, including material movement and staging, and non-liquid fissile operations.

Building 9204-02E: The resident inspectors conducted a joint walkdown of Building 9204-02E with an NPO facility representative (FR). The focus of the walkdown was to review the progress CNS made on de-inventorying transient combustibles as part of their response to the recent pyrophoric events (see 02/24/23, 03/03/23, and 04/21/23 reports). Two unrelated issues were identified during the walkdown. The first issue was the discovery of an inattentive employee conducting precision measurements on a non-fissile weapons part. After discussing the matter with the worker, the resident inspectors and the NPO FR continued their walkdown stopping to observe radiological work that was being conducted in the area. The NPO FR discussed the scope of the radiological work being performed with the worker and questioned the worker on the details of the radiological work permit (RWP) they were working to. It was discovered that the worker handling the material was not signed on to a RWP as required. The NPO FR spoke with the worker's supervisor and directed the Shift Manager be contacted. The supervisor paused the work and notified a radiological control technician (RadCon). RadCon determined that no personnel contamination had occurred, and the worker was wearing proper anti-contamination clothing. After this determination, the supervisor allowed work to resume. This is the third RWP usage issue identified in Building 9204-02E this year (see 2/3/23 and 4/7/2023 reports). In the resident inspector's opinion, the actions taken by the NPO FR were sufficient given the issue. CNS has not yet decided if they will conduct an event investigation on this third RWP non-compliance to try to prevent another recurrence.