

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 5, 2022

TO: Christopher J. Roscetti, Technical Director

FROM: Frank Harshman, Clinton Jones, and Brandon Weathers, resident inspectors

SUBJECT: Oak Ridge Activity Report for Week Ending August 5, 2022

DNFSB Staff Activity: Brandon Weathers completed his assignment as an Oak Ridge resident inspector and returned to DNFSB Headquarters, where he will join the Nuclear Programs and Analysis group.

Y-12: Severe weather last Thursday resulted in a power outage that impacted a large portion of the site. No significant safety impacts were reported but Building 9215 personnel did report an occurrence due to an unplanned entry to a limiting condition of operation due to a loss of annunciation capability for the criticality accident alarm system.

Building 9212: The resident inspectors performed a walkdown of the facility this week. While in the facility, they observed CNS personnel respond to a nuclear criticality safety backoff. CNS personnel were evaluating whether two drums were potentially loaded with a fissile mass above the container loading limit. The area around the drums was administratively controlled and nuclear criticality safety personnel responded to evaluate the situation. After further review, CNS determined that the fissile mass in the drums had been previously measured and the values were below the container loading limit. The resident inspectors viewed this as a good example of a manager reviewing information for containers that had been stored in the area for a long period of time and responding conservatively, per the established process, to a potential issue until it was proven to be compliant. The resident inspectors also walked down an area where several legacy items, including the Raschig ring drum (see 5/27/22 report), were under nuclear criticality safety administrative control awaiting disposition. The legacy items were stored in a higher elevation section of this area and most items had been placed on carts or pallets to provide additional clearance above the floor. Maintaining the items at a conservative elevation is important to maintain a safe storage condition. Due to a failed sump pump on Monday, water had temporarily collected at a lower elevation of the general area where the items are stored. The resident inspectors did not find evidence that water had reached the legacy items.

Building 9204-2E: The resident inspector observed an operational drill in Building 9204-2E which houses the sites Assembly Disassembly Operations (ADO). The drill scenario simulated a dropped part in the environmental room. Facility personnel responded appropriately given the scenario, however a significant portion of the drill scenario was unnecessarily simulated, lessening the impact of the drill. The drill monitors supplied all conditions and indications and at times, the drill monitors participated in deliberations on the facility response. The resident inspector provided feedback to the drill team at the conclusion of the drill. Over the past two years, CNS has been working to restore the Y-12 operational drill program (see 4/29/22 report). Twenty-nine operational drills are scheduled to be completed this fiscal year. However, ADO was scheduled to only perform a single drill. All of other Y-12 organizations on the drill schedule are performing multiple drills throughout the year.