

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 19, 2019

TO: Christopher J. Roscetti, Technical Director
FROM: Matthew Duncan and Brandon Weathers, Resident Inspectors
SUBJECT: Oak Ridge Activity Report for Week Ending July 19, 2019

Nuclear Criticality Safety: On Monday, CNS held a fact finding meeting for the June failure-to-pour events that occurred during casting operations in Building 9212 (see 6/28/19 report). The resident inspector observed that the fact finding resulted in good discussion between the organizations present and identified potential areas for improvement. This demonstrated that conducting effective fact findings provides an important venue for different organizations to identify gaps that contributed to the event and provide ideas for developing actions to address those gaps. The fact finding also provides a formal means for getting those actions documented and entered into a system that tracks them to completion. However, the failure-to-pour events did not have a timely initial event notification to communicate what had occurred to all appropriate organizations. There was a failure-to-pour on June 18 and then two additional failure-to-pour instances on June 24. An initial event notification was not made until July 8 which significantly delayed the decision to conduct a fact finding (held on July 15).

The resident inspectors have previously reported on personnel errors in Building 9204-2E related to positioning of material in fissile material storage arrays (see 5/31/19 and 6/7/19 reports). As a result of the two overlap issues discovered on May 16, bumpers were put on the portable work table to prevent low dollies from being able to roll under it. There have been at least three other personnel errors related to fissile material storage arrays in Building 9204-2E since that event. The most recent instance occurred on Tuesday. The additional three events were field correctable and are being tracked by the criticality safety officers. Personnel in the facility have been briefed on fissile material storage array requirements as a result of the May 16 event, but this has not been effective at stopping the issue.

This week CNS Production Operations gave direction to its personnel to require a fact finding for all nuclear criticality safety deficiencies regardless of whether they are a result of personnel error. This is in addition to an earlier commitment that CNS made to NPO to perform a causal analysis for nuclear criticality safety deficiencies that occur due to personnel error. Since the deficiency for the May 16 event was canceled, it will not require a fact finding or causal analysis.

The CNS enterprise procedure for event recovery and notification process has included guidance to consider conducting a fact finding for a “NCS [nuclear criticality safety] violation (deficiency)” or when “repetitive problems occur” since being issued in September 2016. A fact finding has not been held to investigate the cause and develop additional actions to prevent recurrence of the series of personnel errors related to fissile material storage arrays in Building 9204-2E.

Waste Shipments: On July 11, the DOE Environmental Management Nevada Program notified NPO that the CNS Y-12 waste certification program has been suspended due to a noncompliance with the Nevada National Security Site waste acceptance criteria (see 7/12/19 report). CNS continues their investigation and development of a corrective action plan.