

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

September 26, 2016

TO: Steven Stokes, Technical Director
FROM: William Linzau, Jennifer Meszaros and Rory Rauch, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending September 23, 2016

J. Meszaros began her assignment as one of the Board's Oak Ridge site representatives. Staff members B. Broderick and D. Shrestha were at ORNL to observe a review of waste packaging and treatment programs at transuranic waste generator sites, which was led by DOE's Carlsbad Field Office and the WIPP contractor, Nuclear Waste Partnership, LLC.

Building 9995/Nuclear Criticality Safety (NCS): This week, CNS management held a fact-finding meeting to discuss a waste drum in Building 9995 that was found to exceed an NCS mass limit. The drum contains uranium-bearing organic wastes from sampling activities and was filled incrementally during an 18 day period in August 2016. On Tuesday, operations personnel reviewed sample results from the drum in question and found the total uranium mass in the drum to be higher than expected. Later that day, NCS engineers identified that this mass exceeded a drum-specific NCS limit. A formal critique is scheduled for next week to further investigate the event. In the interim, the area in which the drum is located has been placed under administrative control and similar waste operations have been suspended.

Highly Enriched Uranium Materials Facility (HEUMF)/Fire Protection: In early August, an NPO facility representative (FR) questioned if a floor scrubber used in the facility was in compliance with the safety basis given that it did not have the same electrical fire resistance rating of other equipment used in the facility. Due to confusion between CNS operations and engineering personnel, there was a delay in starting the potential inadequacy in the safety analysis (PISA) process resulting in the "new information" form not being submitted until September 15, 2016. Upon initiation of the process, operations personnel determined that the floor scrubber and a scissor lift used in the facility represented discrepant as-found conditions because both lacked the more rigorous electrical fire resistance rating. CNS removed both pieces of equipment from the facility to correct the condition and are working to further improve the timely implementation of the new information process to prevent future delays.

HEUMF/Conduct of Operations: The HEUMF technical safety requirements (TSR) document contains an annual surveillance requirement to verify that select drums are secured in their storage positions in accordance with certain specifications. Last week, NPO issued its August 2016 operational awareness report, which documented an NPO FR's observation that CNS Special Nuclear Materials Operations (SNMO) operators were not performing this surveillance in accordance with the applicable procedure. The report stated that the FR brought the observation to an SNMO work coordinator who provided the procedure to the operators for use during the remainder of the activity. This week, upon learning of the FR's observation, SNMO management held a fact-finding meeting. Given the six week period that transpired between the initial observation and the fact-finding meeting, representatives at the meeting were unable to determine whether a procedure violation definitively occurred. However, SNMO management committed to re-perform the portion of the surveillance completed that day given the questions surrounding its adequacy. The fact-finding meeting also identified concerns that the applicable procedure was not initially present in the immediate work area (per Y-12 conduct of operations requirements), the operators' immediate supervisor was not notified of the FR's procedure compliance concerns, and the surveillance results were not being tracked on a configuration-managed form (though appropriate records of the surveillance results are kept).