

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Steven Stokes, Acting Technical Director
FROM: William Linzau and Rory Rauch, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending September 6, 2013

Staff members D. Campbell and M. Horr were at Y-12 to conduct a review of electrical systems in Buildings 9215 and 9204-2E as part of a broader evaluation of Y-12 aging infrastructure.

Building 9215: B&W held a fact finding meeting to evaluate events associated with a water leak on a material storage vault in Building 9215. Per procedure, upon observing the leak, facility personnel moved away from the area and notified the shift manager and nuclear criticality safety (NCS) personnel of the leak. The NCS engineer directed that a tarp be placed over the vault to mitigate a criticality concern and documented the configuration change in memorandum of conference and conversation. The Building 9215 Change Control Board subsequently approved the tarp as a temporary modification to the configuration of the vault. During a technical review of this change, members of the review team determined that the presence of the tarp had the potential to compromise the credited safety function of the fire sprinkler systems in the area by shielding the vault interior from the sprinklers. Before safety basis analysts could definitively determine the impact of the tarp on the effectiveness of the fire sprinkler system, the NCS engineer determined that the water intrusion did not pose a criticality safety hazard because of the quantity and type of material in the vault. The shift manager directed personnel to remove the tarp the next morning. Facility personnel believe the source of the water to be a roof leak, but the exact location of the leak has not been determined.

Building 9212: In response to questions from NPO, B&W held a fact finding meeting to evaluate events associated with the spread of contamination in E-wing during work activities to upgrade a ventilation system. Construction personnel were modifying ducts outside Building 9212 to tie in new equipment to replace the Stack 110 bag house (see 7/19/13 report). After the ventilation fans in the building had been secured and work had started, the continuous air monitors in E-Wing alarmed, indicating elevated airborne radiological contamination levels in the area. A radiological control technician (RCT) responded to the alarm and noted slight air flow out of the contaminated ventilation ducts that support casting operations. The RCT surveyed the area, found levels of radiological contamination requiring respiratory protection, and posted the area accordingly. During the fact finding meeting, production facilities personnel indicated that they were not aware that the scope of this work activity included the installation of new ducts outside the building. This knowledge may have allowed them to take action to prevent the issue, though the exact cause of the backflow of contaminated air into the wing has not been determined. E-wing was successfully decontaminated prior to resuming normal production work activities.

Oak Ridge Office of Environmental Management (OREM): OREM sent a letter to Wastren Advantage, Inc. (WAI) directing them to stop design, construction, and preparations related to the Sludge Processing Facility Buildouts Project. OREM took this action to allow WAI to focus on the ongoing mission at the Transuranic Waste Processing Center (TWPC). OREM management will evaluate options for the design work associated with the sludge project during the next few weeks.