

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Steven Stokes, Technical Director
FROM: William Linzau and Rory Rauch, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending November 14, 2014

Building 9720-5: On October 27, 2014, the Building 9720-5 Shift Manager was in the process of granting work start approval for a fire protection system surveillance activity when he noted that Fire Department Organization personnel were not planning to conduct the semi-annual surveillance of the wet pipe sprinkler system as scheduled. Upon further investigation, the Shift Manager discovered that the surveillance had been completed on September 29, 2014, but the facility had not entered the limiting condition for operations as required when the sprinklers are made inoperable. The Shift Manager informed the Operations Manager who declared a Technical Safety Requirement violation.

Nuclear Facility Hazard Categorization (HC): Last January, NPO's Assistant Manager for Nuclear Safety and Engineering sent a letter to B&W requesting a review of the HC of Buildings 9204-2, 9995, 9206 and 9720-5 (see 1/24/14 report). In September, CNS responded by deferring a decision on Buildings 9204-2 and 9206 until more information could be collected. Regarding Building 9720-5, CNS indicated that a path forward would be handled as part of the efforts to expand and accelerate material-at-risk reduction activities in Area 5. For Building 9995, the letter expresses that the facility HC cannot be reduced because the inventory requirements needed to support Production operations could not be lowered to a level that precludes the potential for a criticality accident. Last week, NPO issued a letter that non-concurred with the CNS response for Building 9995 and provided CNS several specific questions for consideration while developing a follow-on response.

Emergency Management: Last week, the CNS Emergency Management Program Organization (EMPO) issued a report documenting the results of a series of drills intended to improve the Y-12 Plant Shift Superintendents' (PSS) proficiency at determining and issuing protective actions for events involving the simultaneous release of hazardous materials from multiple buildings. EMPO personnel conducted the drill series as a means of addressing a finding from a June 2014 exercise during which the PSS failed to direct the affected plant population to take protective actions in response to a simulated release of hazardous materials from multiple buildings (see 8/15/14 report). The drill series comprised 20 different multi-building simulated hazardous release scenarios (four scenarios for each of the five PSS shifts). EMPO intentionally conducted these drills in a training (vice test) environment. The site reps observed several of these drills and believe the training environment was appropriate, given the nascent state of Y-12's processes for responding to severe events. The drills proved to be quite valuable as they exposed several weaknesses in the tools used by the PSS to aid in the categorization of severe events and initiation of protective actions for severe events. The improvement items generally related to the content and arrangement of the Emergency Action Levels and the software used to aid the PSS in determining proper protective actions for simultaneous releases from multiple buildings.

Fire Protection: CNS provided NPO a plan that lists actions to address the extent of condition and corrective action plan (CAP) for the failure to conduct tests of two backflow preventers associated with the fire protection systems in Buildings 9201-5N and 9201-5W (see 10/17/14 report). One of the actions in the CAP was to perform a causal analysis in order to understand the failure mechanisms. The causal analysis is due to be completed in mid-December. CNS recently upgraded the ORPS report for this event to a significance category 2, which requires a more rigorous root cause analysis.