

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 June 20, 2014

J. Deplitch and M. Helfrich were at Y-12 to observe the annual emergency exercise.

Building 9212: Earlier this week, a small fire occurred when gloves ignited at the end of the E-Wing casting line. Operators had oxidized a batch of uranium briquettes over the weekend. When they returned to work Monday morning, per typical practice, they spread the briquettes on the floor of a hood to allow for additional cooling. The operators then moved on to work in other hoods. About 45 minutes later, they noticed that the gloves attached to the hood were burning. Operators used a non-flammable cleaning product to douse the flames and notified their supervisor, who called 911. The operators were wearing respiratory protection and there was no personnel contamination or injury. There was no clear cause identified during the fact-finding meeting, but the proposed corrective actions included evaluating a change to fire resistant gloves for this operation and evaluating the adequacy of the location of fire extinguishers in the area.

Emergency Management (EM): B&W conducted its annual EM exercise this week. The primary objective of the exercise was to demonstrate the site's progress in attaining preparedness for severe events affecting multiple facilities. The exercise scenario involved a large earthquake damaging multiple facilities, releasing toxicological and radiological materials, and resulting in various injuries. The focus of the exercise was on decision making at the command and control centers and the use of new severe event emergency action levels (EALs). As such, it did not involve participation at the individual facilities or field play from emergency responders. This exercise was an intermediate step in the efforts to demonstrate the site's ability to respond to multi-facility severe events and Y-12's EM organization is planning to conduct a full-participation multi-facility exercise in the future.

This exercise and the new EALs are part of the site's response to the DOE Office of Health, Safety, and Security's April 2013 memo requiring all Program Offices to evaluate their site emergency management's programs' response to severe accidents/events. B&W's EM organization derived these EALs in a technical basis document that built upon existing Emergency Planning Hazards Assessments (EPHAs) for individual buildings. The primary difference between the new technical basis document and a standard EPHA is that the technical basis document grouped buildings into hazards assessment zones that are based on the concurrent vulnerability of each group of buildings to a particular severe or cascading event initiator. For example, all seismically-vulnerable buildings with sufficient quantities of hazardous materials to exceed onsite or offsite protective action criteria thresholds were grouped into the same zone. These hazard assessment zones formed the foundation for a set of evaluated severe events and corresponding EALs. B&W sent the new EALs to NPO for approval last month. NPO plans to use this week's exercise to inform its review and approval efforts.

Transuranic (TRU) Waste Processing Center (TWPC): The Wastren Advantage, Inc. (WAI), General Manager sent a revised start-up notification report (SNR) to OREM indicating that WAI will not meet its targeted completion date for processing the Solid Waste Storage Area (SWSA)-5 wastes (see 6/21/13 report). The revised schedule is due to impacts from the suspension of shipments to Waste Isolation Pilot Plant and a newly postulated detonation hazard associated with processing the SWSA-5 wastes (see 5/23/14 report).