

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 21, 2009

TO: Timothy Dwyer, Technical Director  
FROM: Donald Owen and David Kupferer, Oak Ridge Site Representatives  
SUBJECT: Activity Report for Week Ending August 21, 2009

**Highly Enriched Uranium Materials Facility (HEUMF).** The site reps. observed a full-scale emergency management exercise that simulated a fork-lift fire near operations personnel that were conducting re-containerization tasks in HEUMF. The site reps. shared their observations with Y-12 management including the following: (1) the individual who discovered the fire initially called the Shift Manager instead of calling 911 (which is not consistent with Y-12 General Employee Training), (2) an exercise controller opened doors to help initial responders access the scene of the fire (the site reps. are inquiring whether B&W has demonstrated the ability of fire department personnel to access the HEUMF material access area in emergency situations), and (3) more than 25 minutes elapsed between the fire department being notified of the event and the arrival of initial responders to the scene of the fire.

**Building 9201-5 Documented Safety Analyses (DSAs).** The 9201-5 Complex is functionally divided into two separate areas (Buildings 9201-5/5E and 9201-5N/5W) that have separate, yet interrelated, DSAs. The current production mission in Building 9201-5N/5W is processing (mostly machining) depleted uranium parts. Production operations in Building 9201-5/5E have been shut down for several years. Over the past few years, B&W has reduced the inventory of radiological material in Building 9201-5/5E to below Hazard Category-3 quantities.

B&W has submitted an exemption request to YSO regarding 10 CFR 830, *Nuclear Safety Management*, for the entire 9201-5 Complex. Specifically, B&W is requesting an exemption to 10 CFR 830.202(b)(3), which requires contractors to assign a hazard categorization (e.g., Hazard Category-3) to nuclear facilities. The exemption request states that the accident analyses in the two DSAs demonstrate there are no significant radiological consequences that can be attributed to materials stored and processed in the 9201-5 Complex. Based on the accident analyses, B&W's exemption request states that the 9201-5 Complex meets the qualitative definition of a Below Hazard Category-3 facility and should not require continued maintenance of the DSAs or continued application of the Unreviewed Safety Question process.

YSO requested that B&W provide additional information to support transmittal of the exemption request to NNSA Headquarters. Specifically, YSO requested that B&W provide (a) the results (i.e., consequences) of accident analyses using current hazardous material inventory limits and (b) a description of the controls proposed to prevent or mitigate those consequences.

**Conduct of Operations/Feedback and Improvement.** This week, a B&W engineer supporting weapon component Quality Evaluation (QE) operations discovered that operations personnel exceeded the posted lifting capacity of a hoist during a QE operation in March. The total weight of the rigging equipment and component (1300 lbs) exceeded the hoist capacity of 1000 lbs. B&W stopped use of the hoist. At the critique called by B&W in response to this discovery, the focus was largely on determining path forward for the hoist and the weapon component that was in the QE octagonal glovebox at the time of the critique and not on evaluating the March event. A YSO Facility Representative questioned this approach and noted the need to evaluate the March event. B&W management decided to reconvene the critique next week to evaluate the March event.