

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 9, 2010

TO: Timothy Dwyer, Technical Director  
FROM: Wayne Andrews, David Kupferer and Donald Owen, Site Representatives  
SUBJECT: Oak Ridge Activity Report for Week Ending July 9, 2010

Dr. Wayne Andrews started his assignment as a site representative this week.

**Conduct of Operations/Dismantlement.** B&W management identified corrective actions regarding two separate violations of a procedural requirement to keep combustibles under protective cover during spark producing operations (see the 6/25/10 and 7/2/10 site rep. reports). B&W senior management discussed these specific incidents at a meeting for Building 9204-2E personnel and emphasized the need for proper disciplined operations including strict procedural adherence. Another key corrective action includes a broad review of procedures to reduce unnecessary upfront precautions and limitations and move those that are specific to procedural steps to the appropriate step(s) in the body of the procedure.

**Reduction Operations/Criticality Safety.** The pickling hood in the furnace reduction area is functionally divided into two work areas that are separated by sheet metal. The criticality safety posting for the hood allows up to three loaded containers in each end of the hood. Last month, a YSO Facility Representative (FR) questioned the criticality safety analysis coverage of a planned activity to characterize materials that had been in the pickling hood for an extended period of time. In follow-up to the FR inquiry, B&W's criticality safety engineers noted that the analysis may not adequately cover the situation in which the materials in each side of the hood are collocated against the sheet metal in the center of the hood. B&W subsequently declared a Potential Inadequacy in the Safety Analysis and follow-up evaluation is in progress.

**Transuranic Waste Processing Center (TWPC).** A DOE-ORO FR reviewing operational logs on Wednesday noted that a TWPC operator had been contaminated last week on clothing and that this contamination event was classified as not reportable. Alpha contamination of 22,500 dpm/100cm<sup>2</sup> was found on a glove worn while working at a glovebox supporting hot-cell operations (no direct skin contamination was found). Following inquiry by the FR, Wastren Advantage issued an external report of the event. A critique is scheduled for next week.

**Pressurized Drum Event – Update.** Based on a near-miss event in April 2009 where the lid of an unvented 55-gallon drum was forcefully ejected upon loosening of the drum closure ring, B&W initiated certain response actions (see the 2/12/10, 6/19/09 and 4/10/09 site rep. reports). A new Standing Order that provided clear restrictions on opening unvented drums had been put in place. In lieu of a site-wide procedure with definitive requirements and controls to replace the Standing Order, however, B&W had decided earlier this year to only develop a guidance document/bulletin. B&W issued this guidance document last month and canceled the Standing Order. The site reps. still consider that without definitive requirements and controls for management, handling and opening of unvented drums, pressurized drum events may not be prevented in the future. The site reps. again discussed this observation with Y-12 management.