DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 5, 2009

TO: Timothy Dwyer, Technical Director

FROM: Donald Owen and David Kupferer, Oak Ridge Site Representatives

SUBJECT: Activity Report for Week Ending June 5, 2009

Highly Enriched Uranium Materials Facility (HEUMF). Testing of HEUMF safety systems has been in progress for several months (see the 1/30/09 site rep report). One of the more complex test efforts involves the Secondary Confinement System that is now expected to start next week and be completed by early July. This week, the site rep. observed a meeting of the B&W Readiness Certification Assurance Board (RCAB), which was created to review the progress of line management readiness efforts (see the 1/30/09 site rep report). The RCAB requires that senior line managers present their evaluation and affirmation of readiness in a specific area (as defined in a detailed set of readiness criteria) and that an independent reviewer also present their assessment of readiness in that area. For example, one readiness criterion reviewed by the RCAB was placement of accident and routine fixed radiation dosimetry per site procedures. The reviews of the RCAB will be key to B&W's future line management declaration of readiness, which is expected in the Fall of 2009.

Furnace Reduction Operations. A B&W system engineer determined this week that two furnace reduction operations were recently conducted where the safety-significant reactor vessel was not within its periodicity for an annual vessel inspection (a detailed visual inspection). The safety basis requires that the vessel be inspected every two years, but the requirement has been implemented more restrictively as an annual inspection (the reason for the difference was not immediately determined). While no safety basis violation was identified, B&W considers that improvements to the tracking and verification of this requirement prior to vessel use are warranted; in particular, B&W established that there was no check in the operating procedures that the inspection requirement is met. Determination of corrective actions is in progress.

Conduct of Operations. B&W management recently transferred responsibility for Building 9201-5 operations from the Production Division to the Waste Operations and Integrated Facilities Disposition Project Division. Efforts have been in progress to de-inventory Building 9201-5 to below Hazard Category-3 quantities of nuclear material (see the 3/20/09 site rep. report). As part of the de-inventory effort, B&W started an operation this week to stabilize potentially pyrophoric depleted uranium saw fines. A YSO Facility Representative (FR) was observing this operation on Wednesday and identified that certain procedural steps were not being followed by the sub-contractor performing the work. Specifically, these steps include (1) securing the containers for movement (the containers were not strapped together), (2) moving saw fines containers one at a time to the processing area (multiple containers were located in the process area at one time) and (3) placing the saw fines container into a containment tub partially filled with water (the containment tub was not used). In response to the FR's observations, B&W suspended the saw fines processing on Thursday and has scheduled a critique for Monday.

New On-site Transfer Vehicle (SST-E). B&W has completed its Implementation Validation Review (IVR) to independently confirm implementation of Technical Safety Requirements (TSR) controls for SST-E on-site transfers, which are to support HEUMF load-out (see the 4/24/09 site rep. report). The IVR report identifies several findings and observations regarding TSR control implementation, but also identifies a finding regarding failure of the safety basis to adequately evaluate and determine TSR controls for a vehicle roll-over event.