DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 19, 2009

TO: Timothy Dwyer, Technical Director

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

SUBJECT: Activity Report for Week Ending June 19, 2009

Staff member Richard Tontodonato visited Oak Ridge to observe nuclear operations.

Highly Enriched Uranium Materials Facility (HEUMF). YSO completed its formal assessment of B&W's resolution of nonconformances associated with the fasteners for the safety-class storage racks (see the 5/29/09 site rep. report). YSO concurred with B&W's conclusion that the fasteners meet design criteria and will perform the intended safety function.

This week, B&W provided the staff and site reps. additional information on lack of proper identification of safety structures, systems and components (SSCs) as safety equipment in the Construction Specifications used by the HEUMF construction contractor (see the 5/22/09 site rep. report). B&W has identified three SSCs (fire water distribution, fire sprinkler systems, and structural penetration seals) that were not specifically identified as safety equipment. B&W indicated, however, that the Construction Specifications included appropriate quality assurance requirements and technical specifications for all of the HEUMF SSCs. Over the next few months, B&W will complete detailed evaluations of all SSCs to ensure adequate quality assurance documentation exists and will prepare evaluation reports for each SSC.

Uranium Processing Facility (UPF). This week, an independent headquarters team of outside experts completed the on-site portion of a review of the size and scope of UPF (see the 5/15/09 site rep. report). The review team is expecting to brief NNSA Headquarters on results by the end of July and plans to issue its final report in the August/September timeframe.

Excess Facility Cleanup/Conduct of Operations. Last week, B&W held a critique of a subcontractor's failure to follow procedural steps during initial operations to stabilize potentially pyrophoric depleted uranium saw fines in Building 9201-5 (see the 6/5/09 site rep. report). This issue was identified by a YSO Facility Representative during her observation of the operation. B&W determined that sub-contractor personnel were not properly using and following the procedure. B&W personnel noted to the site reps. that corrective actions identified include remedial training on proper use and adherence to procedures and on proper communications with shift management when abnormal/unexpected conditions arise. No formal corrective action was identified, however, regarding the need for enhanced oversight by B&W for such sub-contractor operations. The site reps. discussed this observation with Y-12 management.

Pressurized Drum Event - Followup. In April, B&W reported a near-miss event where the lid of a 55-gallon drum was forcefully ejected upon loosening of the drum closure ring by an operator (see the 4/10/09 site rep. report). In addition to a new Standing Order providing certain restrictions on opening unvented drums, YSO and B&W have been evaluating the need for other actions. B&W is developing enhanced training on pressurized drum hazards and controls and has concluded that a new site-wide procedure on drum safety is warranted. B&W intends that the new procedure will require case-by-case evaluations on the need for venting various populations of drums. The site reps. and staff suggested that the requirements regarding venting in DOE Manual 435.1-1, *Radioactive Waste Management*, be considered in developing this procedure.