

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

TO: Timothy Dwyer, Technical Director
FROM: Wayne Andrews and David Kupferer, Site Representatives
SUBJECT: Oak Ridge Activity Report for Week Ending July 29, 2011

ORNL Tank W-1A. Last week, Bechtel Jacobs Company (BJC) completed its second Management Assessment (MA) of Tank W-1A removal activities to validate readiness to proceed with the contractor Operational Readiness Review (ORR, see the 4/15/11 report). The MA team identified 23 findings including a few instances in which the work package could not be performed as written.

Also last week, ORO formally rescinded its exemption request, the purpose of which was to authorize DOE and the contractor to perform concurrent ORRs (see the 7/8/11 report). The current schedule for initiating the contractor and DOE ORRs is August 8th and August 29th, respectively. UCOR, a partnership of URS and CH2M HILL, is scheduled to assume responsibility for Tank W-1A startup and operations from BJC on August 1st.

Conduct of Operations. B&W has been executing several initiatives to improve conduct of operations and its operations assessment and oversight processes (see the 5/20/11 and 7/1/11 reports). These initiatives include the following: (a) increase management oversight for some operations such as assembly and dismantlement (already implemented), (b) improve operator training on conduct of operations (to be completed by the end of this fiscal year), (c) issue formal guidance on standardized place keeping techniques (to be completed next month), (d) issue formal guidance to reduce the number of precautions and limitations included in procedures (to be completed by the end of this fiscal year), and (e) evaluate its nuclear operations assessment and oversight processes (to be completed next week).

Last week, NNSA Headquarters directed the NNSA site offices—including YSO—to review formality of operations deficiencies that have occurred this fiscal year, identify common contributing factors, and evaluate corrective actions that have been taken. These reviews are expected to be completed in September.

Highly Enriched Uranium Materials Facility (HEUMF). YSO directed B&W to address concerns raised during last week's staff-to-staff interactions as part of B&W's annual update to the Documented Safety Analysis (DSA) for HEUMF (see the 7/22/11 report). Specifically, in addition to incorporating analysis of toxicological hazards into the DSA (see the 6/24/11 report), YSO directed B&W to (a) provide an improved basis for the unmitigated fire, (b) evaluate a small fire that would not be large enough to activate the fire suppressions system, and (c) improve discussion of the functional requirements for the fire suppression system to better address how the system prevents a small fire from developing into a large fire.

ORNL Uranium-233 Disposition Update: The site representatives received an update from ORO this week (see the 6/17/11 report). DOE plans on shipping the first container of Zero Power Reactor (ZPR) plates to the Critical Experiments Facility at the Nevada National Security Site (NNSS) by the end of this calendar year. ORO has confirmed the availability of certified transportation containers for this activity. The project team is working to minimize the timeframe between completing the shipments of ZPR material and initiating shipments of Consolidated Edison Uranium Solidification Project canisters to NNSS for disposal.