

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 4, 2005

TO: J. Kent Fortenberry, Technical Director
FROM: R. Todd Davis/Donald Owen, Oak Ridge Site Representatives
SUBJECT: Activity Report for Week Ending November 4, 2005

Staff member A. Hadjian visited Y-12 to observe a seismic/structural review of Building 9212. Staff members R. Raabe, D. Winters and outside expert D. Volgenau visited ORNL to review work planning for the Tank W-1A soil sampling activity.

A. Building 9212 Seismic Deficiencies. In early-October, NNSA briefed the Board on their proposed response to the Board's April 20, 2005 letter concerning seismic deficiencies for the Building 9212 complex. As a part of the proposed approach, the second phase includes a review of the facility by seismic experts to evaluate the deficiencies and identify appropriate facility modifications. This review was performed this week at Y-12. The team concluded that the upgrades previously identified by BWXT are appropriate, identified additional upgrade options for consideration, and suggested that further engineering evaluation for some deficiencies may be appropriate. The team plans to complete their report in December.

B. ORNL Tank W-1A Soil Sampling. As noted on October 21st, work planning documents, including activity hazard analysis, radiological work evaluations and work instructions/permits, had been completed by Bechtel Jacobs Company (BJC) to extract samples from the highly radioactive soil around tank W-1A. A line management assessment had been pending for this week and an independent BJC Readiness Assessment (RA) had been scheduled for next week. This week, the staff and site rep. observed the work area and available equipment, viewed a demonstration of the soil core retrieval task, and noted observations on overall work planning. The staff and site rep. found that mockup training and dry runs of the various tasks were not yet completed and BJC was not close to being prepared for an integrated demonstration of the full sampling activity to support a line management declaration of readiness. Following staff and site rep. inquiry on BJC plans for cutting of some soil cores (for radiological characterization or size reduction for waste packaging) outside of a glovebox, BJC management decided that all cutting of soil cores will be performed in the glovebox. Several other staff observations on work planning dealing with hazard analyses, radiological hold points, etc., were discussed. DOE-ORO and BJC personnel indicated that the BJC RA will be delayed and observations addressed.

C. Building 9212 B-1 Wing Fire Protection System. Earlier this year (see 8/26/05 site rep. report), the site reps. noted that the support clamps for the recently installed sprinkler system in B-1 Wing were not consistent with those installed for the Oxide Conversion Facility (i.e., no lateral support straps). BWXT personnel recently informed the site reps. that they plan to install these straps to provide additional support during a seismic event. Work planning and scheduling are in progress.

D. Y-12 Disposition of Chemical Traps. BWXT is planning to unload 153 chemical traps used in the uranium enrichment process that have been stored for more than 15 years in a Y-12 facility currently undergoing deactivation (see 8/26/05 site rep. report). This week, the site rep. observed a line management activity demonstration conducted in preparation for startup. The site rep. noted that the main flange for unloading the trap pellet material and the process gas inlet flange are in the flow path of the local ventilation used to reduce the airborne hazard. The process gas outlet flange has no such engineered control, however, when opened as part of a check that all material is removed. The site rep. has inquired on the basis for this approach with site personnel.