

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 14, 2003

TO: J. Kent Fortenberry, Technical Director
FROM: Donald Owen, Oak Ridge Site Representative
SUBJ: Activity Report for Week Ending November 14, 2003

Staff member Wayne Andrews visited Y-12 to review operations at certain facilities. Staff members Randall Robinson and William Von Holle visited Y-12 to review safety management of research and development activities at Y-12 (including corrective actions stemming from the April 2003 explosion/fire during a chemical process development activity).

A. Melton Valley Waste Processing Facility (WPF). As reported last week, the DOE-ORO line management assessment for startup of supernate processing was in progress. The line management assessment was completed this week and results were briefed to DOE-ORO and Foster Wheeler personnel. The primary issue identified was the lack of demonstration of reliable, steady-state operation during the assessment. Leakage of seals on the dryer shaft, dried waste bagout problems, and tank valve leakage were a few of the problems interrupting the demonstration during the course of the DOE-ORO review. Such problems pose the potential for frequent, high radiation exposure maintenance work. Other issues such as lack of defined preventative maintenance for certain equipment and procedure inaccuracies were noted. DOE-ORO personnel noted that resolution of these issues will likely delay the DOE Office of Environmental Management (EM) Operational Readiness Review until mid-December. (3-A)

B. Combustible Control/Housekeeping. The staff and site rep. performed a walk-down of Building 9201-5 where depleted uranium arc melt operations are conducted in a small portion of the building. A large portion of the building, however, is used for storage of various legacy materials, containers, and parts, some amongst various shutdown process equipment. The staff noted the substantial amount of combustible, excess/unnecessary materials and poor housekeeping in several sections of the inactive area of the building. This lack of control of unnecessary combustibles is similar to that observed by the staff and site rep. during a walk-down of the Building 9212 E-Wing basement area (see the June 27th site rep. report). The staff and site rep. discussed this observation with YSO and BWXT management. BWXT senior management stated to the site rep. that a new, site-wide housekeeping initiative is starting wherein each facility will be independently assessed and rated on a monthly basis. (1-C)

C. DOE-EM Facilities at Y-12. Several DOE-EM nuclear facilities are operated by Bechtel Jacobs at Y-12 for processing radioactive waste and storing legacy materials. This week, the staff and site rep. reviewed actions taken in response to certain safety issues noted in the Board's letter of October 15, 2001. The safety basis for the Depleted Uranium Storage Vault and Transient Storage Shed was reviewed with no issues noted. In addition, the personnel associated with the facility (facility manager, DOE-ORO facility representative, DOE project manager and others) were knowledgeable of what constituted the safety basis, the hazards, the controls, and the future disposition plans for these facilities/hazardous materials. This was in sharp contrast to the situation noted in the October 2001 Board letter. During this review, it was also learned that another DOE-EM facility at Y-12, the Above Grade Storage Facility, is being upgraded from a radiological facility to a Hazard Category 2 nuclear facility due to an increase in the amount of nuclear material to be stored. The staff will review its safety basis in the near future. Finally, there are many nuclear facilities at Y-12 that DOE-EM has intended to transition to NNSA within the next year or two but no agreement on plans, staffing, funding etc., has been reached at this time. (3-A)