

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 15, 2002

TO: J. Kent Fortenberry, Technical Director
FROM: Matt Forsbacka, Oak Ridge Site Representative
SUBJ: Activity Report for Week Ending February 15, 2002

W. Andrews, B. Broderick, M. Helfrich and T. Hunt were on site to review BWXT Y-12 disassembly, enriched uranium, and material disposition operations and Bechtel Jacobs Company safety basis improvement activities.

A. Y-12 Disassembly: An Operations Safety Board (OSB) was convened on Wednesday to review corrective actions resulting from the discovery of out-of-date glovebox o-rings reported last week. This discovery item impacts gloveboxes site-wide. The OSB allowed the resumption of disassembly on Thursday, and the operation was completed that same day. Pertinent information regarding the OSB's approval of resuming glovebox operations include:

1. The rationale for ordering certified o-rings was explained by the design engineer responsible for the glovebox port system procurement in 1992. O-rings are replaced with each glove-box glove change out; therefore, 1600 o-rings were ordered to ensure a several year supply. In addition to certifying the dimensions and composition, the manufacturer specified a shelf life of five years. It does not appear that this requirement was formally captured.
2. Preinstallation inspection of o-rings for rotting, pitting, and cracking is performed with each o-ring installation. The design engineer confirmed that this was necessary and sufficient to ensure adequate performance. His position was that the actual age of the o-ring is of no consequence.
3. Furthermore, the oxygen monitoring system would alert an operator to a leak from any source. (2-A)

B. External Reviews of NNSA/YAO: On Monday, representatives from the Institute for Regulatory Science (RSI), a non-profit organization, discussed the application of a technical peer review process for assisting Federal project managers and decision makers in formulating the technical bases for the feasibility and safety of programmatic work. RSI, operating under a grant funding mechanism, performs its work with independent technical experts using industry consensus standards. YAO is considering using RSI to add technical rigor in its reviews of programs such as Y-12 Enriched Uranium Reduction Vessel. (2-A)

C. Oak Ridge National Laboratory Building 3019: To date, 16 packages from the tube vaults have been inspected and characterized. The facility will perform planned maintenance next week, so activities will be suspended. In addition, a HEPA filter changeout will be initiated. Successful completion of this activity could become critical as the 10-year limit on the HEPA filters expires next month. The roughing filters will also be replaced, perhaps for the first time. The frames for the roughing filters do not match the design drawings, so additional effort is needed to properly fit the replacement filter system. (3-A)

cc: Board Members