DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 22, 2002

TO: J. Kent Fortenberry, Technical Director
FROM: Tim Hunt, Oak Ridge Site Cognizant Engineer
SUBJ: Activity Report for Week Ending November 22, 2002

Staff member Wayne Andrews was on site this week providing Site Representative coverage.

A. BWXT Y-12 Enriched Uranium Operations (EUO) Wet Chemistry Restart Preparations: As reported last week, the BWXT Y-12 General Manager led a review to assess the readiness status of EUO wet chemistry activities. This week the General Manager provided the Y-12 Site Office (YSO) with a path forward for startup. It includes a focused contractor Operational Readiness Review (CORR) during the weeks of December 9 and 16, 2002. The contractor is still developing the Plan of Action (POA) for the CORR. It is anticipated that YSO will take two weeks to review and approve the POA. BWXT Y-12 is evaluating incorporation of General Manager's reviews into their readiness process.

In addition, an interim letter to the Board on Y-12 EUO wet chemistry startup is to be issued soon. Among other things, it will state that NNSA plans to brief the Board in early-January in response to the Board's October 3, 2002 letter. This brief will be prior to start of the NNSA ORR, now scheduled for mid- to late-January. (2-A)

B. BWXT Y-12 EUO Criticality Safety: The Board letter of November 13, 2002, regarding criticality safety at the Y-12 site, requested a response within 60 days. An interim response is being prepared at Y-12 for submittal to NNSA-HQ for issuance. The letter is expected to state that Y-12 will provide a briefing on the subject of criticality safety at the same time it briefs the Board on EUO wet chemistry startup in early-January, 2003. In discussions with both the contractor and NNSA, it is apparent that they have come to the conclusion that although the Board letter focused on Building 9212 and criticality safety, these are site-wide issues that include additional programmatic areas. Among the other areas of potential weakness are conduct of operations, material processing and disposition, and standardization of containers. The staff has reviewed the corrective actions for affected areas of Building 9212 and they appear adequate if they are executed properly. There does not yet exist a site-wide corrective action plan. In addition, the design and engineering of future facilities (e.g., Highly Enriched Uranium Materials Facility) should be done so as to minimize the potential for these types of events. (2-A)

C. BWXT Y-12 Building 9206 Occurrence: The recent occurrence where the safety analysis for the Building 9206 Basis for Interim Operation did not assume that a dibutyl carbitol fire would involve the solution in the secondary extraction columns has been upgraded from Off-Normal to Unusual due to the USQD resulting in a positive USQ. This assumption was contrary to a Building 9212 analysis for the same accident scenario. This occurrence was a direct result of the Board's May 13, 2002 letter and attached staff issue paper which questioned the fire scenarios and airborne release fractions which the contractor was using for its safety basis to support wet chemistry startup in Building 9212. (2-A)