

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 27, 2003

**TO:** K. Fortenberry, Technical Director  
**FROM:** D. Grover and M. Sautman, Hanford Site Representatives  
**SUBJ:** Activity Report for the Week Ending June 27, 2003

Waste Treatment Plant: During an oversight inspection being conducted by Office of River Protection (DOE-ORP) staff to determine the Bechtel National Incorporated's (BNI) readiness to begin structural steel construction, DOE-ORP discovered that procurement specifications for important-to-safety (ITS) structural steel had included standards not authorized for project use. This problem appears to primarily involve the incorrect flowdown of standards/requirements derived from the top level standard specified in the Safety Requirements Document (SRD) into procedures and specifications (flowdown of daughter standards). DOE-ORP has made BNI aware of the problem with the expectation that BNI will gather the information necessary to understand how the loss of configuration control occurred, how wide spread it is, its safety significance, and needed corrective actions. DOE-ORP expects that this information will be available prior to the completion of this inspection, currently scheduled for July 10, 2003. Currently, there is insufficient information to assess the degree that this problem impacts the entire project or its potential significance since procurement specifications are developed separately by each engineering discipline. BNI is taking more immediate actions to determine the degree this issue effects the civil-structural discipline and its other ITS procurements, while also developing their approach for assessing the other engineering disciplines. BNI is also planning to complete a technical evaluation of the structural steel already received onsite to determine its acceptability for use (no ITS structural steel has been installed to date). This evaluation should address whether the standards used for procurement were adequate given the ITS function of these materials. (I-C)

Spent Nuclear Fuel Project (SNFP): This week the SNFP decided to permanently post the entire K-West Basin as a contamination area. The occasional discovery of unexplained contamination in the portions of the basin identified as buffer areas played a part in the decision. The major reason given was continuing production delays while surveys are completed to downgrade from a contamination area to buffer area following identification of contamination or when the basin is posted as an airborne radioactive area to handle highly contaminated fuel transfer casks. (III-C)

Cesium and Strontium Capsules: Fluor Hanford (FH) has issued a Request For Proposal to transfer the capsules from wet storage at the Waste Encapsulation and Storage Facility into dry storage similar to that used for commercial nuclear fuel. As part of this effort, FH has chartered a capsule advisory panel to assure there is a sound technical basis for the repackaging, processing, and dry storage of these capsules. This week the panel conducted meetings on site to discuss progress to date. The site rep attended these meetings and raised a concern that the panel was primarily evaluating the storage scope of the project and not adequately evaluating issues associated with repackaging and processing. For example, the procurement specification requires proof of dryness testing, typically done by measuring pressure rebound under vacuum conditions, yet no thermal analysis of capsules under vacuum conditions was planned to be performed. Another observation was that no DOE personnel attended the technical discussions. (I-C)