

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

July 28, 2000

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers / R. T. Davis
SUBJECT: SRS Report for Week Ending July 28, 2000

Tritium Extraction Facility Groundbreaking: On Thursday, Secretary of Energy Bill Richardson, John Gordon, National Nuclear Security Administration (NNSA), Carolyn Huntoon, DOE-EM, Madelyn Creedon, NNSA, Greg Rudy, DOE-SR, Joe Buggy, WSRC, and others participated in the groundbreaking ceremony for the Tritium Extraction Facility. Excavation activities for the Remote Handling Building begin this month with construction activities scheduled for January 2001. Tritium operations at this facility are scheduled to begin in 2006. Following the ceremony, a site representative met with Administrator Gordon, Ms. Creedon, and Dave Beck to discuss tritium activities at SRS.

HB-Line Criticality Analysis: This week, the staff held a televideo conference with DOE-SR and WSRC to discuss the revised Double Contingency Analysis (DCA) for the HB-Line Phase I mixed scrap campaign (site rep weekly 7/21/00). The staff noted that the DCA appeared to be an improvement from past analyses. For credible criticality scenarios, the analysis typically identifies independent controls for separate criticality parameters. However, these controls are typically administrative. When controls for separate parameters are not available, an engineered control along with an administrative control is identified.

As a part of the analysis, many criticality scenarios were judged to be incredible based on the current plant configuration and procedures. DOE-SR and WSRC agreed that these assumptions would be verified prior to startup and that the Unreviewed Safety Question process would verify that these assumptions are not invalidated. In addition, the staff questioned the lack of Defense-In-Depth controls for criticality scenarios. WSRC stated that additional defenses are present but not identified in the DCA and agreed to consider capturing these controls in a future revision.

F-Canyon Material Stabilization: The Spent Nuclear Fuel Management Record of Decision (ROD) was signed this week. This ROD allows WSRC to commence with the Mark 42 and EBR II stabilization campaign in the F-Canyon facility (site rep weekly 6/30/00). WSRC is staging material and preparing the dissolvers. Dissolving is expected to begin by Thursday of next week.

Public Interaction: On Tuesday, a site representative briefed the Citizens Advisory Board (CAB) on the Board's response to the Recommendation 2000-1 implementation plan. For plutonium metals and oxides, the site representative emphasized that the Building 235-F project does not achieve the objective of the Board's recommendation and that DOE should quickly formalize a plan for complying with the DOE Interim Safe Storage Criteria. The CAB adopted recommendations requesting DOE to advise the CAB on the path forward for interim plutonium packaging, finalizing the TVA agreement relative to the HEU Blend-down project, and requesting additional funding to ensure commitments are maintained.