

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 27, 1998

**MEMORANDUM FOR:** G. W. Cunningham, Technical Director  
**FROM:** J. Kent Fortenberry / Joe Sanders  
**SUBJECT:** SRS Report for Week Ending February 27, 1998

**Application of S/RIDs and ISM to the Accelerator Project (APT)** - The weekly report of 12/26/97 noted that the APT contract requires DOE to provide the contractor a list of Orders and directives to be utilized. While this remains to be done, the contracting officer at DOE-AL requested and has been furnished a list pertaining to design. DOE and the contractor team are evaluating whether to develop a "design S/RID" which could eventually be linked to the SRS S/RID. In responding to the DNFSB reporting requirement on Integrated Safety Management (ISM) DOE-SR stated that the SRS S/RID applies to project design and construction performed by WSRC, but noted that "for the work subcontracted by WSRC to other entities, applicable ES&H requirements are identified and included in the subcontract commensurate with the nature of work and hazards." DOE-SR has decided to add significant subcontracted projects such as APSF, TEF, and APT to the list of priority facilities in an effort "to better understand the integration challenge across different contracts."

The DEAR clause requiring Integrated Safety Management only applies to management and operating contracts. The APT contract does not contain this DEAR clause, but DOE is evaluating amending the APT contract to incorporate this or a similar clause applicable to design. Operation of APT at SRS will eventually fall under the SRS M&O contract which requires ISM.

**Spent Nuclear Fuel Cut at L-Basin** - Foreign Research Reactor aluminum based MTR-type fuel assemblies were being placed into storage at L-Basin this week. Upper and lower non-fuel regions are removed by cutting with an underwater circular saw to reduce storage space. Ten of the fuel assemblies received had 5 cm already cut from one end. This condition was clearly noted in the required shipping papers and supplemental drawings. However, engineering provided cutting instructions based on the uncut dimensions. As a result, six of the ten elements were cut through the fuel region. After cutting the sixth element, operations noticed the exposed plates of the fuel region and stopped cutting. Two hot-particle contamination events have been reported since the fuel was cut. Surprisingly, the facility does not have an abnormal operating procedure to address damaged fuel. Instead, the event was controlled by a criticality LCO. The facility has taken some measures to address the radiological aspects of the event (water samples and area surveys). In addition, some items unrelated to criticality were included in the criticality LCO response plan to address the potential for future contaminations. WSRC and DOE-SR have agreed to evaluate the need for an abnormal operating procedure to control this type of event. The disposition of the cut fuel (at-risk, suitable for continued storage, etc.) has not yet been determined.

**Preparations to Startup Tritium Loading Line (LL) 6** - WSRC and DOE-SR completed their Readiness Assessment for the introduction of tritium into LL6 (i.e., perform hot tie-ins). LL6 will be used to load Acorn and Terrazzo reservoirs. The results were positive with only minor findings. The ability to perform reservoir loading will be review and verified by DOE personnel prior to initiation of loading in the May - June time-frame.