

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 22, 1997

**MEMORANDUM FOR:** G. W. Cunningham, Technical Director  
**FROM:** J. Kent Fortenberry / Joe Sanders  
**SUBJECT:** SRS Report for Week Ending August 22, 1997

Rich Tontodonato was on site this week reviewing high level waste tank farm operations and Recommendation 96-1 progress. Facility walkthroughs included the In-Tank-Precipitation (ITP) Filter-Stripper Building, F-Tank Farm Tank Closure, and the privatized Duratek vitrification facility.

**Tritium Production and Extraction** - The original \$4.5 billion accelerator concept is based on current maximum tritium requirements. Expectations of tritium requirements continue to decrease. DOE recently looked at providing for the *minimum* reasonable tritium requirement while also providing for possible design changes or future additions to increase capacity if needed. At present, the most promising approach is an accelerator half as long to produce half the tritium. The cost would supposedly also drop by one-half. This 'short' design would theoretically accommodate changes to increase production until about 2002 without significantly affecting the target startup date of 2007. After 2002, design changes needed to increase tritium production would affect the target startup date. The start of APT design in October 1997 will probably pursue this 'short' design.

DOE-SR is also evaluating incorporating the Tritium Extraction Facility (TEF) into the APT facility. Initial estimates are that the current \$384 million TEF could be accomplished with a \$116 million addition to the APT facility. This evaluation should be completed next month.

**FB-Line Bagless Transfer System** - The FB-Line Bagless Transfer System was demonstrated using a dummy aluminum button this week. Although not without problems, the overall 'cold run' was successful. DOE-SR will be finalizing their readiness assessment findings early next week. Several pre-start findings are expected, addressing weld quality, inspections to meet DOE-STD-3013 requirements, procedure improvements, and the ability to detect pressure buildup in the sealed container.

**DOE-SR Possible Reduction in Force (RIF)** - During the possible upcoming RIF, as well as can be determined, the facility representative position will be preserved but individuals currently qualified as facility representatives will have no special protection. Currently qualified facility representatives will remain in their current position only if they have sufficient 'seniority' in the federal service. As such, it is possible that some qualified facility representatives could be replaced with new incumbents needing a considerable amount of training.