Draft Recommendation
(December 31, 2010)

Programmatic Risk Reduction-Spare Equipment and Spare Parts

**Background** The CAB would like to acknowledge DOE’s extensive planning to meet its program objectives on time and within budget. In particular the CAB would like to reference the following reports as examples: The SRS Strategic Plan, EM Program Management Plan, System Plan, Critical Path Schedule, Risk Handling Strategy, Risk Management Plan, Risk and Opportunity Assessment Report, and the System Health Monitoring Program.

Recent presentations to the CAB have shown the two highest programmatic risks for the High Level Waste System Plan are: Equipment Reliability and Major System Failure. To a large extent, these risks can be equated to a lack of spare equipment and/or spare parts.

Equipment reliability and major equipment failure are a major concern to the CAB. Meeting tank closure commitments requires that key equipment operate at the expected operating/production rates. One major outage could very quickly affect the entire operating system. (See Gear Chart for reference.) In addition, delays could extend the time period associated with Safety Risks for the High Level Waste Tanks. Major outages are expensive considering the cost to operate the High Level Waste Systems is in the range of $500M per year.

The issue regarding spare equipment and/or spare parts is becoming more important considering that the existing High Level Waste facilities are aging and are being required to operate at two to three times historical rates in order to meet present tank closure schedules. In addition the operating conditions are changing, many becoming more severe and probably resulting in reduced equipment life.

**Recommendation:** The Savannah River Site Citizens Advisory Board recommends that DOE;

1) Provide an estimate of the risk reduction as it relates to spare equipment and the spare parts budget.
2) For existing operations, identify areas where equipment life histories are being “pushed” because of operating rates or more extreme operating conditions. (For example: DWPF melter and off-gas system, Saltstone production equipment, and sludge batch preparation equipment.)
3) Describe how projected life expectations are determined and justified.
4) Describe how the spare equipment and/or spare parts program is or is not consistent with “shorter life history” scenarios.
5) For SWPF, provide the basis for equipment life and the spare parts inventory.