

3.3 Savannah River Operations Office Summary

The Savannah River Site (SRS) was established in 1950 to produce special radioactive isotopes for national security purposes (e.g., plutonium-239 and tritium). In addition to this primary mission, SRS has produced other special isotopes to support research in nuclear medicine, space exploration, and commercial applications (for example, californium-252, plutonium-238, and americium-241).

Since the end of the Cold War, the mission of SRS has changed. Emphasis has shifted from nuclear material production to environmental management. The Environmental Management (EM) program was initiated in 1989 to address the closure of old burial grounds and seepage basins. In FY 1992, the last of the production reactors was briefly operated. The production mission of the reactor program and supporting facilities

was formally ended the following year. Current activities managed by EM cover three major programs: nuclear material and facility stabilization and facility deactivation; environmental restoration; and waste management. The primary drivers for these programs are the Federal Facility Agreement, the Federal Facility Compliance Act Consent Order, the Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 94-1, and DOE order 430.1A (Life Cycle Asset Management). These agreements define commitments and milestones for the Savannah River Site.



3.3.1 End State

The status of the projects is such that no significant land use changes are projected through 2006. While progress will be made to reduce legacy risks and eliminate "mortgage" requirements as much as possible, the land-use designations will remain basically unchanged for any particular project area and the site as a whole. Significant changes in land-use designations may occur in the future, and will be addressed as the SRS Comprehensive Plan is developed. Development of this plan began in the fall of 1997, and will be completed in 10-14 months. Stakeholder involvement in future land-use decisions has already begun with the Savannah River Site Citizens Advisory Board, area planners, chambers of commerce, municipalities and others providing suggestions for future land use. As the Comprehensive Plan is developed, internal and external site stakeholders will be continually

involved in the process. SRS plans to store mixed waste off site at a Resource Conservation and Recovery Act (RCRA) Subtitle C Landfill once the mixed waste Record of Decision (ROD) is issued. SRS is planning to accept 473 spent nuclear fuel casks from foreign sources and 1,241 spent nuclear fuel casks from domestic sources during the entire spent fuel receipt program (1996 through 2035). The receiving basin for the fuel is expected to remain classified as nuclear industrial use.

After the site EM mission is complete, site boundaries should remain unchanged, and the land should remain under the ownership of the federal government for either a new site mission or as the first National Environmental Research Park. Regional environmental groups and national researchers have stressed that the site boundaries should remain unchanged to preserve its unique habitats. The flora and fauna at the site are such that the site could be used as a sanctuary for environmental study and observation. Additional information about Savannah River end states and long-term stewardship can be found in the Savannah River version of *Paths to Closure*.

3.3.2 Cost And Completion Dates

The Savannah River Operations Office has divided its environmental management work into 84 discrete projects. A Project Baseline Summary (PBS) exists for each project and contains detailed programmatic information, including cost, schedule, scope, end state, and interim milestones. A summary of the cost and schedule information for these projects is illustrated in Exhibit 3-14 (some of the 84 projects have been combined to simplify the graphic). For more information on each project, see the individual PBS.

The estimated EM life-cycle cost for the Savannah River Operations Office is \$29.7 billion (constant 1998 dollars). This estimate does not include approximately \$0.1 billion (constant 1998 dollars) of non-EM costs. The life-cycle cost is a planning estimate which includes costs for facility deactivation and long-term monitoring. Decisions on the ultimate end state of some of the facilities have not been made yet; the planning estimate is not intended to preclude any ultimate end state options. Based on these planning assumptions, the estimate could be applied to a range of decontamination and decommissioning options, including cocooning of facilities, as well as potential environmental restoration work. The overall completion date for EM work scope at the Savannah River Site is 2038, with long-term surveillance and monitoring activities continuing beyond 2070.