

Transuranic Waste

- Approximately 11,000 cubic meters of transuranic waste are currently in inventory (primarily stored in drums and black boxes) and 10,000 cubic meters of transuranic waste are expected to be generated over the life cycle of cleanup operations. After a combination of sorting, segregation, and repackaging, 16,000 cubic meters are planned for disposal at WIPP.

High-level Waste

- Over 130,000 cubic meters of high-level waste are currently in inventory and approximately 16,000 cubic meters of high-level waste are expected to be generated from future nuclear material separation operations. After sludge washing, salt processing, and vitrification, 4,000 cubic meters of vitrified high-level waste are planned to be disposed of at an off-site geologic repository and 760,000 cubic meters of low-level waste saltstone are planned to be disposed of at an on-site vault.
- Forty-nine high-level waste tanks and additional facilities will be managed. After washing and stabilization, tanks will be closed in place and other facilities will be deactivated.

Other Waste

- Approximately 3,500 cubic meters of mixed low-level waste are currently in inventory and over 11,000 cubic meters of mixed low-level waste are expected to be generated over the life cycle of cleanup operations. After a range of treatment activities, 3,600 cubic meters are expected to be disposed of at an off-site facility.
- Approximately 26,000 cubic meters of low-level waste are currently in inventory and over 2.0 million cubic meters of low-level waste (including 1.3 million cubic meters of process water) are expected to be generated over the life cycle of cleanup operations. After a range of treatment activities, including effluent treatment and commercial compaction, 100,000 cubic meters are expected to be disposed of at an on-site disposal cell, 1,000 cubic meters are expected to be sent to an off-site commercial facility, and 3.0 million cubic meters of treated effluent are planned to be discharged through a National Pollutant Discharge Elimination System outfall.

Remedial Action

- Approximately 12 million cubic meters of environmental media including soil, rubble & debris, and groundwater contaminated with radionuclides and hazardous substances will be managed. After treatment, 4,000 cubic meters of residues are expected to be disposed of on site and 1.8 million cubic meters of environmental media are expected to be capped in place.
- Nearly 160 million cubic meters of environmental media, including soil, rubble and debris, and groundwater contaminated with hazardous substances, will

be managed. In addition to the planned incineration of 180 cubic meters of residues at the Consolidated Incineration Facility (CIF), contaminated media are expected to be addressed by a number of treatment processes, including air sparging and air stripping.

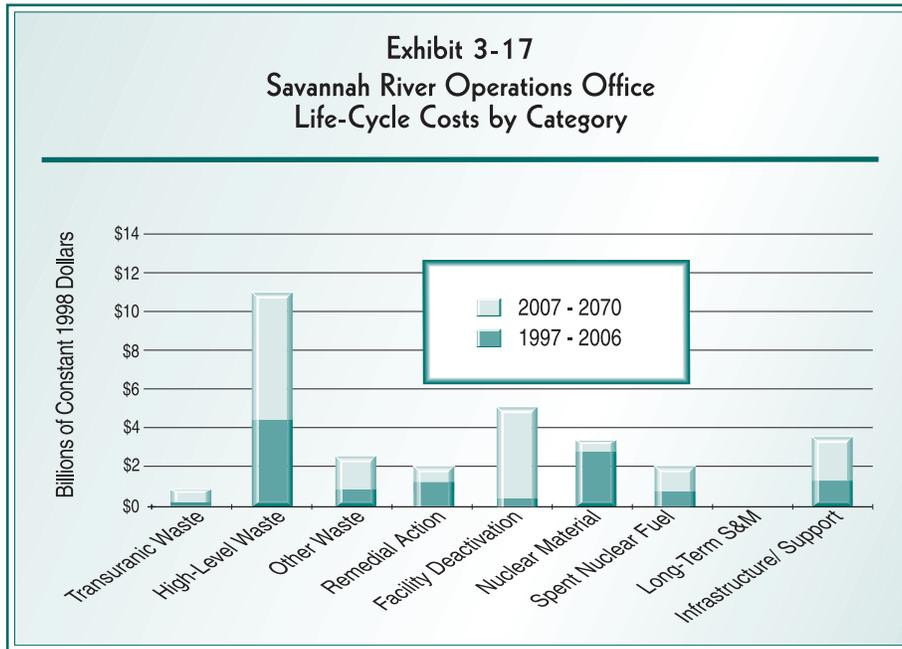
Nuclear Materials

- Nuclear materials quantities are classified and cannot be disclosed in this document.

Spent Nuclear Fuel

- Approximately 20 metric tons heavy metal of spent nuclear fuel are in inventory and 30 metric tons heavy metal of spent fuel are expected to be received from off site. After on-site management, the spent fuel is expected to be placed in an off-site geologic repository.

Exhibit 3-17 illustrates the life-cycle costs by major work scope categories. High-level waste accounts for the largest portion of the total life-cycle cost at the Savannah River Operations Office. The Facility Deactivation category accounts for the second greatest portion of life-cycle costs.



3.3.4 Critical Closure Path and Programmatic Risk

The critical closure path schedule presented in Exhibit 3-18 sets forth the timetable for completing closure activities at the Savannah River Operations Office. The critical closure path identifies the sequence of major cleanup activities that have little scheduling flexibility and must occur without delay if the SRS EM cleanup mission is to be completed on time. In Exhibit 3-18, the highlighted activities show the critical closure path, which represents the series of events that drive the overall completion date for the site; the bars represent critical activities; and the diamonds represent critical events and milestones that must occur for Savannah River Operations Office to be completed as planned. Sites have assigned programmatic risk scores to each of these activities and events.

Completion of the EM mission at the Savannah River Operations Office as scheduled will depend on the timely accomplishment of critical activities and events. Exhibit 3-19 presents a summary of activities and milestones on the critical closure path that have high programmatic risk (programmatic risk scores of 4 or 5 in any category). Appendix D provides a complete definition of programmatic risk. In their formal PBS submission, Savannah River identified 22 activities and events with high programmatic risk values. Four of these have high work scope uncertainty and are associated with projects that have life-cycle costs in excess of one billion dollars. For more information on the management approach for these programmatic risk issues, see the Savannah River Operations Office version of *Paths to Closure*.