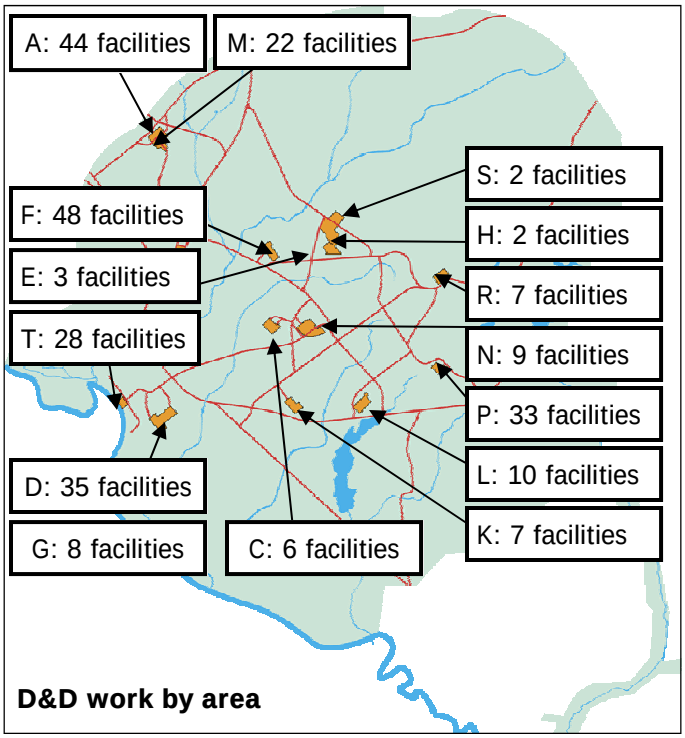
Decommissioning and Demolition (D&D)

D&D has been a major emphasis at the Savannah River Site since 2003. Under the Department of Energy's cleanup initiative, reducing the site footprint has been a high priority. Now, most of the buildings that have completed their mission have been removed.

By the end of 2007, 264 buildings covering more than 2.5 million square feet had been demolished. Another 700 buildings covering over 8 million square feet remain to be decommissioned or removed as their missions are completed. D&D work is expected to continue until about 2032.

D&D does not necessarily mean demolition. For some buildings, a more sensible, safe solution is in-situ decommissioning, or entombment. The D&D process involves determining what the best end state is for any given facility, and achieving that end state in a safe, efficient manner.



D&D work by area

Now, the Site D&D and Soil and Groundwater Closure Projects organizations are working together to close entire areas across the site. This approach, known as Area Completion, safely and cost effectively accelerates closure of entire areas, rather than one waste unit at a time. Area Completion is endorsed by SRS's regulators and was first used in T Area, the site's first industrial area, which was located on the Savannah River. The area was closed in 2006, four years early, at a cost savings of $37 million.

M Area in 2002 and 2007, before and after demolition work.

The next areas slated to undergo Area Closure are M, P, R and D.

M Area

Historically, M Area was the beginning of the SRS production process. Here, facilities produced materials for use in SRS reactors. All operations have been shut down since the late 1980s. Demolition was complete in 2006, and final soil and groundwater cleanup activities are now under way.

M Area closure is scheduled to be complete in 2010, two years early, avoiding costs of about $30 million.

P and R Areas

R Reactor was the first to go critical in 1953. P was the second, in 1954. P Area will be SRS's first reactor area to undergo Area Completion., followed by R. SRS's regulators have endorsed a precedent-setting in-situ end state, which means the reactor building itself will remain in place, safely deactivated and entombed.

P Area covers 100 acres and will encompass 11 waste units. Workers operated the reactor without a lost time injury from its startup in 1954 until its shutdown in 1988.

Demolition work of all buildings (33 buildings covering 329,000 square feet) except the reactor has been completed, and soil and groundwater cleanup work is under way. P Area closure is expected to be complete in 2014, which will avoid about $335 million over dismantling the reactor and addressing the waste units one at a time.

In R Area, all but one ancillary building has been demolished, and activities are under way to render the area "cold and dark." R Area closure is expected in about 2015.

P Area before demolition work.

P Area after demolition work.

D Area

D Area is located only a few hundred yards from T Area and the Savannah River. The function of D Area's facilities was to extract heavy water from the river for use in SRS reactors.

Demolition of the heavy water extraction and purification facilities was completed in 2006. The area also includes a power plant, which will remain in service until it is replaced by an energy-efficient biomass unit in the next few years.

Final soil and groundwater cleanup is under way. Area Closure is expected to be complete in 2013.

Contributed by Fran Poda, WSRC Public Affairs

D Area after demolition work. The power house appears at top left.