



Saltstone Disposal Unit 6

Saltstone Disposal Units (SDU) are permanent disposal units for low-activity waste grout produced from solidification of decontaminated non-hazardous salt waste at the Savannah River Site (SRS). These units are cylindrical concrete tanks that are based on a design used commercially for storage of water and other liquids. The 32.8-million gallon SDU 6, completed in May 2017, is more than 10 times larger than the other six SDUs that each hold about 3 million gallons. SDU 6 is designed for the larger decontaminated salt solution stream to be produced by the Site's Salt Waste Processing Facility.



Key facts:

- SDU 6 is more than 10 times larger than the six previously constructed tanks, and is the first of seven planned to store the remaining tank waste.
- It is designed to accommodate the larger decontaminated salt solution stream that will be produced by the Site's Salt Waste Processing Facility.
- The Department of Energy, Office of Environmental Management approved replicating the efficient SDU 6 design for all remaining SDUs.
- The larger design of SDU 6 will result in substantial cost savings over the life of the project because it requires less infrastructure and materials to design and build.
- SRS would have needed 80 of the smaller saltstone disposal units. Only six more of the larger units are needed to meet mission needs.

By the numbers:

- SDU 6 measures 42 feet high and 375 feet in diameter.
- It will hold approximately 32.8 million gallons of grouted decontaminated low-level salt waste.
- More than 13,000 cubic yards of concrete was used in its construction.
- The walls of the tank are wrapped in 289 miles of pre-tensioned wire strand, which is 3/8 of an inch thick. The tank walls were designed to expand outward as the tank is filled and the wire strand ensures the structural integrity of the tank wall is maintained while waste is being added to the tank.
- The entire inside of the tank is lined with over 7,000 individual pieces of 3 mm thick rubber that were epoxy bonded to the tank walls and floors. This is the largest rubber-lined tank in the world.

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