Facts enterprise·srs

L Area Complex

Personnel at the Savannah River Site (SRS) have extensive experience in safely receiving and storing a wide variety of used nuclear fuel (UNF) assemblies from both domestic and foreign research reactors. Since 1964, SRS has received more than 2,300 casks containing over 45,900 UNF assemblies.

Since 1996, the L Area Complex (LAC) has received about 10,400 UNF assemblies in 506 casks from off-site sources. Fuel types include high and low enriched uranium used fuel. LAC has received and handled about 10 different UNF transportation casks weighing up to 65,000 pounds. LAC also made about 360 on-site used fuel casks transfers during this time.

The L Area Complex

L Area   Underwater storage facilities, called disassembly basins, were located in all five SRS production reactor areas. These facilities were designed to store UNF and target assemblies discharged from the reactor cores. This storage allowed the nuclear material to cool after being irradiated in the reactors. The basins were also used to prepare the nuclear materials for transport to F and H Area processing facilities.

In 1996, L Basin equipment was reconfigured to safely handle and store UNF from off-site (foreign and domestic) research reactors. In February 1997, the first off-site fuel was received and stored in L Basin. To avoid the cost of operating multiple facilities, SRS decided in 1998 to consolidate all of SRS's stored used fuel into the much larger, recently refurbished L Basin. By 2003, L Basin was SRS's only fuel receipt and storage facility. L Basin currently stores 30 metric tons of heavy metal in used fuel.

L Basin has concrete walls two and a half to seven feet thick and holds approximately 3.5 million gallons of water with pool depths of 17 to 50 feet. All used fuel assemblies are "cool" enough to be safely stored without an active basin water cooling system. The basin water provides shielding to protect workers from radiation.

LAC employees move a fuel assembly to its storage location in L Basin.