

Facts

from the **Savannah River Site**

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SRS Building 235-F

Building 235-F at the Savannah River Site (SRS) was part of the original construction in the early 1950s. It has had several production missions throughout its operational life, each of which has left a stamp on the robust facility. Its operations have benefited our nation's defense, the National Aeronautics and Space Administration (NASA) and Department of Energy (DOE).

The facility is a blast-resistant, windowless, two-story, reinforced concrete structure about 222 feet long, 109 feet wide, and 28 feet high. It is located in SRS's F Area, near F Canyon.

This production facility's most recent mission was receipt, storage and disbursement of plutonium-bearing materials in support of SRS and the DOE complex. However, in 2006, the storage vaults for nuclear materials were emptied, and the facility is undergoing cleanup and risk reduction activities by removing material at risk.

Actions needed to reduce the remaining hazards within Building 235-F included stack reduction and removal of transient combustibles, restoration of services to the Plutonium Fuel Form (PuFF) Facility cells and gloveboxes, decontamination of the cells and gloveboxes and characterization of the remaining radioactive material.

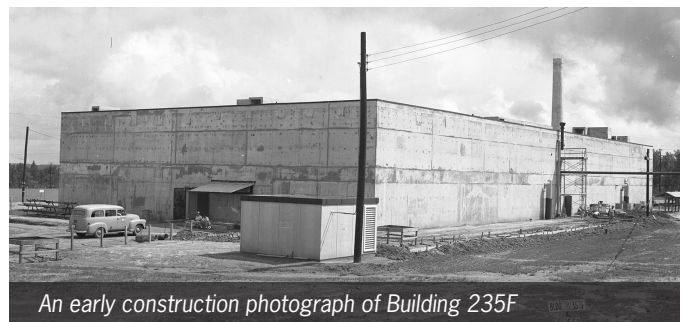
The PuFF Facility was originally designed and operated to manufacture plutonium spheres and pellets for the NASA space program from the late 1970s to the early 1980s. In December 1983, DOE completed plutonium-238 sphere and pellet production for NASA's Galileo and Ulysses space missions at PuFF. Other process lines within Building 235-F include the Actinide Billet Line, Plutonium Experimental Facility and the old metallography lab.

Early in the U.S. space program, scientists recognized that converting thermal energy into electricity using the heat associated with radioactive materials was the best source of energy. Coupling radioactive heat with a thermoelectric converter became the power source of choice for deep-space satellites and probes.

Long-term, deep-space missions such as Galileo, Ulysses and Cassini use SRS plutonium-238 to generate electrical power needed to operate the instruments on board the spacecraft, to include operating cameras, collecting data, and relaying information to the earth.



An aerial photograph of Building 235F at the Savannah River Site



An early construction photograph of Building 235F



The interior of a glovebox in Building 235F

The Savannah River Site is owned by the U.S. Department of Energy. Savannah River Nuclear Solutions is the management and operations contractor at the Savannah River Site.

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