

Facts from the Savannah River Site

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Plutonium Down-blend Process at SRS

Down-blend Process

In April 2016, the Department of Energy (DOE) issued a Record of Decision (ROD) to prepare and process at the Savannah River Site (SRS), six metric tons of surplus non-pit plutonium and ship to the Waste Isolation Pilot Plant (WIPP) for disposal.

Down-blending, also referred to as dilution, involves blending plutonium oxide with an inert material resulting in a final waste form. This produces a mixture that is more secure (not usable for weapons) and can be safely disposed at WIPP. The down-blend will take place in K Area Complex at SRS.

After the material is diluted, it will be placed in secure shipping containers. The shipping containers will be sent to the Solid Waste Management facility at SRS, where they will be certified for acceptance at WIPP and placed in interim storage pending shipment.

Preparations

DOE resumed down-blending in K Area in September 2016. Preparations to support this included a revision of the facility's safety analysis to reflect the down-blending process, developing operational and safety procedures, training personnel on the down-blending process, and performing a readiness assessment to demonstrate that the facility's people and equipment are prepared to begin down-blending operations.

Historical Operations

In 2012, Savannah River Nuclear Solutions successfully down-blended plutonium using the HB Line facility. This material is also sent to WIPP for final disposition.



K Area Complex at the Savannah River Site