Depleted Uranium Hexafluoride (DUF6) was a by-product of the gaseous diffusion enrichment process and it cannot be disposed in its current form.

DUF6 Conversion will allow DOE to reduce inventory of DUF6 currently stored in cylinders at Portsmouth and Paducah.

DUF6 Conversion Process involves five parts:
1. Cylinder recycling
2. Vaporization
3. Conversion
4. Oxide powder handling
5. Hydrofluoric acid recovery system

The process results in two products: uranium oxide and hydrofluoric acid. The oxide is stored for eventual disposal or reuse, and the hydrofluoride is being recycled for use in industrial applications.

DUF6 Conversion Facilities were constructed at DOE’s Gaseous Diffusion Plants in Portsmouth, Ohio and Paducah, Kentucky.

There are currently more than 63,000 cylinders containing DUF6 stored in cylinder yards at the Portsmouth and Paducah sites.

Typical size for a cylinder is 4 feet high (48" in diameter), and can hold 28,000 lbs. of DUF6.

Operations began in 2011. Conversion operations are expected to take about 18 years at Portsmouth and 30 years at Paducah.