

Paducah Site Cleanup By the Numbers

The Paducah Gaseous Diffusion Plant is a U.S. Department of Energy owned facility located in McCracken County, near Paducah, Kentucky, that enriched uranium from 1952 to 2013. It was the last governmentowned uranium enrichment facility operating in the U.S. The Paducah plant produced low-enriched uranium originally as feedstock for military reactors and weapons refining and later for nuclear power fuel. During the 1960s, the plant took part in the Work for Others Program with projects for NASA, ORNL, Sandia and others. The area covers about 650 acres of a 3,556-acre site. Four process buildings cover 74 acres of the total site. Cleanup of the Paducah site began in 1988, including remediation of groundwater, surface water, soil, burial grounds, and removal of inactive facilities. Some key metrics related to the Paducah site include:

>4B

of trichloroethylene (TCE)-contaminated ground water have been treated using pump and treat technology, significantly reducing offsite ground gallons water contamination. TCE is a degreaser used during production years to clean uranium enrichment process equipment and is the largest source of groundwater contamination at the site.

7.724 gallons of TCE and other volatile organic compounds have been removed from the environment using pump and treat technology and by treating source areas.

>66 million pounds of contaminated scrap metal (enough to build a World War I battleship) have been removed from storage yards and shipped off site for disposal. Contaminated scrap metal was a major contributor to surface water contamination.

7 M cubic feet of waste, including legacy, cleanup, and material storage area waste, have been characterized and disposed. If placed on a football field this waste would be about 105 feet high.

cubic feet of soils and sediment contamination have been removed from on-site plant ditches - enough to fill 150 railcars.

84 facilities have been demolished. By 2015 the last of the 32 inactive facilities, some of which were contaminated, had been demolished under the pre-shutdown cleanup scope. 41 additional facilities were demolished by June 2018. More than 400,000 square feet have been demolished in total.

>39,000 metric tons of depleted uranium hexafluoride (DUF6) have been converted by the DUF6 conversion plant at Paducah. It is the mission of EM's two DUF6 plants in Ohio and Kentucky to convert DOE's ~800,000 metric ton inventory of DUF6 into a more stable chemical form for beneficial reuse or other disposition.

