

DOE/EIS-0360

**FINAL ENVIRONMENTAL IMPACT
STATEMENT FOR CONSTRUCTION
AND OPERATION OF A DEPLETED URANIUM
HEXAFLUORIDE CONVERSION FACILITY
AT THE PORTSMOUTH, OHIO, SITE**

Volume 1: Main Text and Appendixes A–H

June 2004



U.S. Department of Energy
Office of Environmental Management

COVER SHEET*

RESPONSIBLE FEDERAL AGENCY: U.S. Department of Energy (DOE)

TITLE: Final Environmental Impact Statement for Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility at the Portsmouth, Ohio, Site (DOE/EIS-0360)

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ABSTRACT: The U.S. Department of Energy (DOE) proposes, via a contract awarded at the direction of Congress (Public Law 107-206), to design, construct, and operate two conversion facilities for converting depleted uranium hexafluoride (commonly referred to as DUF₆): one at Portsmouth, Ohio, and one at Paducah, Kentucky. DOE intends to use the proposed facilities to convert its inventory of DUF₆ to a more stable chemical form suitable for beneficial use or disposal. This site-specific EIS analyzes the construction, operation, maintenance, and decontamination and decommissioning (D&D) of the proposed DUF₆ conversion facility at three alternative locations within the Portsmouth site; transportation of all cylinders (DUF₆, enriched, and empty) currently stored at the East Tennessee Technology Park (ETTP) near Oak Ridge, Tennessee, to Portsmouth; construction of a new cylinder storage yard at Portsmouth (if required) for ETTP cylinders; transportation of depleted uranium conversion products and waste materials to a disposal facility; transportation and sale of the hydrogen fluoride (HF) produced as a conversion co-product; and neutralization of HF to calcium fluoride (CaF₂) and its sale or disposal in the event that the HF product is not sold. This EIS also considers a no action alternative that assumes continued storage of DUF₆ at the Portsmouth and ETTP sites. A separate EIS has been prepared for the proposed facility at Paducah (DOE/EIS-0359). DOE's preferred alternative is to construct and operate the conversion facility at Location A within the Portsmouth site. DOE plans to decide where to dispose of depleted U₃O₈ conversion product after additional appropriate NEPA review.

* Vertical lines in the right margin of this cover sheet and in the remainder of this EIS document indicate changes that have been added after the public comment period.

