

DOE/EIS-0359

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

Volume 1: Main Text and Appendixes A–H

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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 Paducah, Kentucky, Site (DOE/EIS-0359)

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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 DUF<sub>6</sub>): one at Portsmouth, Ohio, and one at Paducah, Kentucky. DOE intends to use the proposed facilities to convert its inventory of DUF<sub>6</sub> to a more stable chemical form suitable for beneficial use or disposal. This site-specific EIS considers the construction, operation, maintenance, and decontamination and decommissioning (D&D) of the proposed DUF<sub>6</sub> conversion facility at three locations within the Paducah site; 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 (CaF<sub>2</sub>) 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 DUF<sub>6</sub> at the Paducah site. A separate EIS has been prepared for the proposed facility at Portsmouth (DOE/EIS-0360). DOE's preferred alternative is to construct and operate the conversion facility at Location A within the Paducah site. DOE plans to decide where to dispose of depleted U<sub>3</sub>O<sub>8</sub> conversion product after additional appropriate NEPA review.

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\* 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.

