

inventory of DUF₆. After it selected its long-term strategy in the PEIS, the DOE intended to conduct site-specific environmental review in accordance with NEPA to identify specific sites and technologies necessary to carry out the strategy.

In the DUF₆ PEIS, the DOE analyzed a wide spectrum of alternatives for the conversion of DUF₆ into products as well as alternatives for storage and disposal of the DUF₆ and the products made from it. The Final DUF₆ PEIS (DOE/EIS-0269) can be found on the World Wide Web at <http://web.ead.anl.gov/uranium>. As part of the analysis, DOE estimated the potential transportation impacts for each of the alternatives by rail and truck. Because the sites for the conversion facilities had not yet been selected, transportation impacts were evaluated for distances ranging from 155 to 3,100 miles, a range that anticipated shipments to Paducah or Portsmouth or a new conversion facility.

In the 1999 ROD, the DOE decided, among other things, that it would take the necessary steps to promptly convert its DUF₆ inventory, that it would select the location of the actual conversion facilities in a project-specific EIS, and that it anticipated shipping approximately 4,700 cylinders from ETTP to the conversion facilities. On the issue of transportation, the ROD recognized that the primary impacts from transportation are related to accidents. If shipments were predominantly by truck, it was estimated that zero fatalities would be expected for the no-action alternative, approximately two fatalities for the long-term storage as DUF₆ alternative, and up to four fatalities for each of the other alternatives. Shipment by rail would result in similar, but slightly smaller, impacts. Severe transportation accidents could also cause a release of radioactive material or chemicals from a shipment that could have adverse health effects. All alternatives, other than no action and long-term storage as UF₆, could involve the transportation of relatively large quantities of chemicals such as ammonia and anhydrous hydrogen fluoride (HF) because their use would be required in the conversion process. Severe accidents involving these materials could result in releases that caused fatalities with HF posing the largest potential hazard. However, because of the low probability of such accidents, the maximum calculated risk for these accidents would be zero fatalities. If HF were to be neutralized to calcium fluoride (CaF₂) at the conversion facility, the risks associated with its transportation would be

eliminated. There would be risks associated with transportation of CaF₂; however, these risks would be much less than those associated with transportation of HF.

Public Law 105-204, signed into law in July 1998, while the DUF₆ PEIS was being prepared, directed the Secretary of Energy to submit to Congress a plan for the construction of plants at Paducah and Portsmouth to convert the DUF₆ inventory. In the ROD, the DOE noted that it had submitted the plan as required and that it planned to review these proposed activities in subsequent NEPA review. DOE initiated its Conversion Plan on July 30, 1999, by announcing the availability of a draft Request for Proposals (RFP) for a contractor to design, construct, and operate DUF₆ conversion facilities at the Paducah and Portsmouth sites.

On October 31, 2000, DOE issued a final RFP to procure a contractor to design, construct, and operate DUF₆ conversion facilities at the Paducah and Portsmouth sites. The RFP stated that any conversion plants that would be built would have to convert the DUF₆ to a more stable chemical form that would be suitable for either beneficial use or disposal. On September 18, 2001, the DOE published a Notice of Intent (NOI) in the **Federal Register** (66 FR 48123), announcing its intention to prepare a site-specific EIS for the proposed action to construct, operate, maintain, and decontaminate and decommission two DUF₆ conversion facilities at Portsmouth, Ohio, and Paducah, Kentucky. As noted above, DOE originally planned to wait until it finished its site-specific EIS review before transporting any of the cylinders. That plan has changed with the advent of Public Law 107-206.

Public Law 107-206, the 2002 *Supplemental Appropriations Act for Further Recovery From and Response to Terrorist Attacks on the United States*, was signed by the President on August 2, 2002. This law required, in pertinent part, that within 30 days of its enactment DOE was required to award a contract for the scope of work described in the October 2000 RFP, including design, construction, and operation of a DUF₆ conversion plant at each of the Department's sites at Paducah, Kentucky and Portsmouth, Ohio. In compliance with the law, on August 29, 2002, the DOE awarded a contract to Uranium Disposition Services, LLC (hereafter referred to as UDS), for construction and operation of the two mandated conversion facilities. The DOE also reevaluated the appropriate scope of its site-specific NEPA review and decided to prepare

two separate EISs, one for the plant proposed for the Paducah site and a second for the Portsmouth site. This change in approach was announced in the **Federal Register** on April 28, 2003 (68 FR 22368).

Now that Congress has determined the locations for the conversion plants, DOE intends to begin shipping a portion of its DUF₆ inventory, up to 1,700 DUF₆ cylinders, from ETTP to Portsmouth beginning in 2003. Portsmouth was chosen based on the availability of storage capacity and the desire to balance cylinder inventory. It is important that DOE begin to ship DUF₆ from ETTP in order to satisfy the terms of a Consent Order with the Tennessee Department of Environment and Conservation with respect to the management of DUF₆ at the ETTP site. DOE has agreed to remove all known DUF₆ cylinders from ETTP by 2009, in accordance with applicable regulatory requirements.

At the same time, DOE will continue with its site-specific NEPA review to determine the exact locations at the Portsmouth and Paducah sites for the conversion facilities and to analyze the impacts of shipping cylinders to these sites.

Basis for Decision

Pursuant to 10 CFR 1021.314(c), the Department has prepared a Supplement Analysis to determine whether or not a new or supplemental EIS is required for the proposed action. Specifically, the Supplement Analysis was prepared to determine whether the DUF₆ PEIS sufficiently analyzed the transportation of up to 1,700 full DUF₆ cylinders. On the basis of the Supplement Analysis, the estimated impacts from the proposed transportation campaign are less than or equal to those described in the PEIS for shipment of the entire ETTP cylinder inventory. Therefore, no new or supplemental EIS is necessary, and no further NEPA documentation is required.

As part of the DUF₆ PEIS, the DOE analyzed the potential environmental impacts of transporting 4,683 full DUF₆ cylinders from ETTP to an unspecified location within the continental United States at three different distances: 250 km (155 mi), 1,000 km (620 mi), and 5,000 km (3,100 mi). Transportation by both truck and rail was considered. The assessment considered risks during both routine (incident-free) transportation conditions as well as from accidents. Because destination sites for the cylinders were not known at the time, the impacts were estimated on the basis of representative national average route statistics. National average accident