NUCLEAR MATERIAL

Several Potential Options for Dealing with DOE’s Depleted Uranium Tails Could Benefit the Government

What GAO Found

DOE’s potential options for its tails include selling the tails “as is,” re-enriching the tails, or storing them indefinitely. DOE’s current legal authority to sell its depleted uranium inventory “as is” is doubtful, but DOE generally has authority to carry out the other options. The department has not finished a comprehensive assessment of these options and is still evaluating the details of how such options might be implemented.

• DOE’s authority to sell the tails in their current unprocessed form is doubtful. Because of specific statutory language in 1996 legislation governing DOE’s disposition of its uranium, we believe that DOE’s authority to sell the tails in unprocessed form is doubtful and that, under rules of statutory construction, DOE likely lacks such authority. However, if Congress were to provide the department with the needed authority, firms such as nuclear power utilities and enrichment companies may be interested in purchasing these tails and re-enriching them as a source of nuclear fuel.

• DOE could contract to re-enrich the tails. Although DOE would have to pay for re-enrichment, it might obtain more value from selling the re-enriched uranium instead of the tails if its re-enrichment costs were less than the discount it would have to offer to sell the tails as is.

• DOE could store the tails indefinitely. While this option conforms to an existing DOE plan to convert tails into a more stable form for long term storage, storing the tails indefinitely could prevent DOE from obtaining the potentially large revenue resulting from sales at currently high uranium prices.

The potential value of DOE’s depleted uranium tails is currently substantial, but changing market conditions could greatly affect the tails’ value over time. Based on February 2008 uranium prices and enrichment costs and assuming sufficient re-enrichment capacity is available, GAO estimates the value of DOE’s tails at $7.6 billion. However, this estimate is very sensitive to changing uranium prices, which recently have been extremely volatile, as well as to the availability of enrichment capacity.

To view the full product, including the scope and methodology, click on GAO-08-613T. For more information, contact Robert A. Robinson at (202) 512-3841 or robinsonr@gao.gov.