Why GAO Did This Study

From 2005 through 2007, uranium prices increased from about $20 a pound to over $140 a pound, leading to renewed interest in uranium mining on federal land. This interest has raised concerns about the potential impacts that more uranium operations could have on the environment. GAO was asked to (1) compare key agencies’ oversight of uranium exploration and extraction operations on federal land, (2) determine the number and status of uranium operations on federal land, (3) identify the coverage and amounts of financial assurances for reclaiming current uranium operations on federal land, and (4) examine what is known about the number and location of abandoned uranium mine sites on federal land and their potential cleanup costs. GAO reviewed agency reports and regulations, surveyed relevant agency field staff on the status of these operations, and examined federal data on uranium operations, financial assurances, and abandoned uranium mine sites.

What GAO Found

The Bureau of Land Management (BLM), the Forest Service, and the Department of Energy (DOE) are the key agencies that oversee uranium exploration and extraction on federal land, but GAO identified three areas where their oversight processes differ. First, these agencies have different processes for notification of uranium exploration or extraction activities on federal land. Second, the agencies require operators to have in place financial assurances to cover the full estimated cost of reclaiming a uranium operation, but they differ in who estimates the value of the financial assurance and the frequency of their reviews of the assurances. Third, under existing authorities, DOE can collect royalties or rents for uranium extraction, but BLM and the Forest Service cannot. DOE has collected about $64 million in rents and royalties from its leasing program since the 1940s.

As of January 2012, a total of 221 uranium operations were on federally managed land, but only 7 were actively extracting uranium and all of these were on BLM land. An additional 29 uranium operations were awaiting federal approval. Of the 202 operations on BLM land, the majority were engaged in either reclamation or exploration activities, according to BLM field officials. In addition, 3 uranium operations were on Forest Service land, and 16 operations were on lease tracts that DOE manages, none of which were actively extracting uranium.

As of January 2012, BLM, the Forest Service, and DOE reported having $249.1 million in financial assurances, and these assurances were generally adequate to cover the estimated reclamation costs for uranium operations on federal land. Nearly all of these assurances ($247.6 million) were for authorized uranium operations on BLM-managed land, with the remaining $1.5 million for authorized operations on Forest Service land and for DOE’s lease tracts. BLM and the Nuclear Regulatory Commission (NRC), which is responsible for overseeing some aspects of uranium operations on federal land, do not coordinate efforts to establish and review financial assurances for in situ recovery operations, which use a series of wells to extract uranium. Such operations account for a large percentage of the total financial assurances held by the agencies.

Federal agencies do not have reliable data on the number and location of abandoned uranium mine sites on federal land or a definitive cost for their cleanup. There are likely thousands of abandoned uranium mine sites on federal land, but GAO identified significant limitations in agencies’ data that make their databases generally unreliable. For example, these databases do not have complete data and do not use a consistent definition of an abandoned mine site. Agencies do not know how many sites will need cleanup, and they do not have information on the total cost to clean up these sites. Based on agencies’ experiences with cleanup at some sites, cleanup costs could vary significantly from thousands to hundreds of millions of dollars, depending on site-specific conditions and the amount and type of work required at each site.

What GAO Recommends

GAO recommends, among other things, that federal agencies better coordinate their efforts when establishing financial assurances and develop a consistent definition for abandoned mine sites. The Departments of the Interior, Agriculture, and Energy, along with NRC and the Environmental Protection Agency (EPA), concurred with these recommendations. In addition, Interior and EPA provided technical comments, which GAO incorporated as appropriate.

View GAO-12-544. For more information, contact Anu K Mittal, (202) 512-3841, mittala@gao.gov