

**Statement of  
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U.S. Department of the Interior  
before the  
House Natural Resources Committee,  
Subcommittee on Energy and Minerals  
on  
H.R. 1314  
June 3, 2011**

Good morning, Mr. Chairman and Members of the Subcommittee. Thank you for the opportunity to appear before you today to discuss H.R. 1314, directing the Secretary of the Interior, acting through the Director of the U.S. Geological Survey (USGS), to conduct a global assessment of rare earth element resources . The Department of the Interior supports the goals of this bill, although we note that the activities called for in H.R. 1314 are within the scope of existing Department of the Interior authorities.

The USGS is responsible for conducting research and collecting data on a wide variety of nonfuel mineral resources, including rare earths (RE). Research is conducted to understand the geologic processes that concentrated known mineral resources at specific localities in the Earth's crust and to estimate (or assess) quantities, qualities, and areas of undiscovered mineral resources, or potential future supply. USGS scientists also conduct research on the interactions of mineral resources with the environment, both natural and as a result of resource extraction, to better predict the degree of impact that resource development may have on human and ecosystem health. USGS mineral commodity specialists collect, analyze, and disseminate data and information that document current production and consumption for about 100 mineral commodities, both domestically and internationally for 180 countries. This full spectrum of mineral resource science allows for a comprehensive understanding of the complete life cycle of mineral resources and materials – resource formation, discovery, production, consumption, use, recycling, and reuse – and allows for an understanding of environmental issues of concern throughout the life cycle.

Global demand for RE is estimated to be increasing at a rate of about 8 percent per year due to increasing applications in consumer products, computers, automobiles, aircraft, and other advanced technology products. Much of this demand growth is driven by new technologies that increase energy efficiency and decrease reliance on fossil fuels. Production of RE is currently highly concentrated in China, which is restricting its exports of rare-earth-element raw materials; China currently produces 97 percent of the world's rare earths, although 20 years ago the United

States was the world's leading rare-earths producer. The ability of the rest of the world to replace supply from China depends on the quality of known global rare earth element resources and the degree to which those resources have been explored and evaluated.

To begin the process of understanding potential sources of RE supply, the USGS has recently completed an inventory of known domestic RE reserves and resources (Long and others, 2010). This study restates basic geologic facts about RE relevant to assessing domestic security of supply and reviews current U.S. consumption and imports of RE, current knowledge of domestic resources, and possibilities for future domestic production. The report also includes an overview of known global RE resources and discusses the reliability of alternative foreign sources of RE.

The logical next steps are to (1) update a global inventory of rare earth resources published by the USGS in 2002 (Orris and Grauch, 2002), (2) review principal RE deposits outside of China and evaluate their geologic, economic, and development potential, and (3) conduct a global assessment of undiscovered RE resources. H.R. 1314, the RARE Act of 2011, outlines a reasonable approach to properly assess the global endowment of RE resources, to identify potential future supplies of RE resources, and to better understand future potential sources of RE needed for United States industry..

The USGS maintains a workforce of geoscientists (geologists, geochemist, geophysicists, and resource specialists) with expertise in critical minerals and materials, including RE. The USGS continuously collects, analyzes, and disseminates data and information on domestic and global RE reserves and resources, production, consumption, and use. This information is published annually in the USGS Mineral Commodity Summaries (USGS, 2011) and includes a description of current events, trends, and issues related to RE supply and demand.

The USGS stands ready to fulfill its role as the sole federal provider of unbiased mineral resource research on known RE resources, assessment of undiscovered RE resources, and information on domestic and global production and consumption of RE resources for use in global RE supply chain analysis. We note, however, that the activities called for in H.R. 1314 are already authorized by existing authorities. Any study conducted to fulfill the objectives of the bill will require substantial resources and would need to compete with other Administration priorities.

Thank you, Mr. Chairman, for the opportunity to present the views of the Department on H.R. 1314. I will be happy to answer any questions you or the other Members may have.

## References Cited

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