Statement for the Record U.S. Department of the Interior House Natural Resources Committee Subcommittee on Energy and Mineral Resources H.R. 2011, National Strategic and Critical Minerals Act of 2011 June 3, 2011

Thank you for inviting the Department of the Interior to testify on HR 2011, the National Strategic and Critical Minerals Act of 2011. The Department recognizes the need for a coherent policy concerning minerals essential to manufacturing, economic well-being and security, and economic competitiveness. Because HR 2011 was just introduced on May 26, 2011, the Department has not had time to conduct an in-depth analysis of the proposal, but we appreciate the opportunity to provide testimony at this time. Consequently, we offer a more general discussion of this important issue at this time and look forward to working further with the Committee on H.R. 2011.

Background

The Department of the Interior is our nation's largest landowner with jurisdiction over 20 percent of the land mass of the United States and 1.75 billion acres of the Outer Continental Shelf. The BLM administers over 245 million surface acres of public land–more than any other Federal agency in the United States. Most of this land is located in the 12 Western states, including Alaska. The BLM also manages 700 million acres of sub-surface mineral estate throughout the nation. The public lands produce commodities that are key to the Nation's economy, and can help provide economic stability and growth for local and regional communities.

The development of energy and mineral resources are among the multiple uses for which the BLM manages lands and resources for the benefit of the public. The BLM manages mineral development under a number of different authorities including the Federal Land Policy and Management Act, the Mineral Leasing Act, the Materials Act of 1947, and the General Mining Act of 1872. Each of these authorities along with BLM regulations and guidance provide a legal framework for the development of minerals.

The Administration supports the development of federally owned natural resources in an environmentally protective manner that ensures a fair return to the taxpayer. Therefore, the 2012 Budget includes a proposal to improve the return to taxpayers by instituting a leasing process under the Mineral Leasing Act of 1920 for new leases on certain minerals (gold, silver, lead, zinc, copper, uranium, and molybdenum) currently covered by the General Mining Law of 1872. The Budget also includes a proposal to reduce the environmental impacts of coal and hardrock mining by dedicating and prioritizing funds to reclaim abandoned mines on Federal and non-Federal lands.

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.

<u>HR 2011</u>

HR 2011 requires the Secretary of the Interior—through the BLM and the USGS—to assess the capability of the United States to meet the demands for minerals essential to manufacturing competitiveness and economic and national security. It requires the Secretary to produce a report to Congress that includes an assessment of the non-fossil-fuel mineral potential of lands under the jurisdiction of the BLM and the U.S. Forest Service within 180 days of enactment. The report also must identify anticipated mineral requirements, current sources of these minerals, implications of shortages, timelines for mineral development projects on public lands, and the cost of litigation. In addition, the report must include an assessment of the Federal workforce and its ability to meet the challenges of the critical minerals issue.

H.R. 2011 requires far-reaching analysis of data spanning the jurisdictions of the Departments of the Interior, Agriculture, Defense, Commerce, and Justice as well as the Office of Personnel Management. As introduced, H.R. 2011 would entail much more than the development of a report, likely requiring the development and implementation of data tracking systems and a commitment of staff resources to gather, input, analyze, and update the data. The administrative time and cost of this work would likely exceed the 180 days and \$1 million authorized by the legislation. H.R. 2011 identifies some important goals, and we appreciate the opportunity to work with the Committee and the other affected agencies to take into account these resource considerations. We also would like to work with the Committee on language clarifying the minerals under consideration.

Conclusion

Thank you for the opportunity to testify here today and I would be glad to take your questions.

Statement of Jeff L. Doebrich, Acting Mineral Resources Program Coordinator U.S. Geological Survey 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 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

Long, K.R., Van Gosen, B.S., Foley, N.K., and Cordier, Daniel, 2010, The principal rare earth elements deposits of the United States—A summary of domestic deposits and a global perspective: U.S. Geological Survey Scientific Investigations Report 2010–5220, 96 p. Available at <u>http://pubs.usgs.gov/sir/2010/5220/</u>

Orris, G.J., and Rauch, R.I., 2002, Rare earth element mines, deposits, and occurrences: U.S. Geological Survey Open-File Report 2002-0189, 174 p. Available at http://pubs.usgs.gov/of/2002/of02-189/

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