Senate committee discusses U.S. foreign dependence on critical minerals

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On July 19, the Senate Committee on Energy and Natural Resources convened a hearing on critical minerals—the fifth hearing on the subject in almost as many years, according to Chairwoman Lisa Murkowski (R-AK). The hearing was held to review the Department of the Interior’s (DOI) recently published final list of critical minerals, which are minerals required for basic civilian and/or military manufacturing and with a supply chain vulnerable to disruption. These critical minerals are used in a broad range of products essential to the economy and national security of the United States—from iPhones and fighter jets to practically every form of modern transportation.

In December of 2017, President Donald Trump released Executive Order 15817 directing DOI, in coordination with other federal agencies, to prepare a list of critical minerals and an interagency report addressing the United States’ vulnerability to disruptions in the supply of those minerals. As outlined in the Executive Order, the report must include a strategy to reduce the nation’s reliance on critical minerals, an assessment of recycling and reprocessing technology development, options for investment and trade through reliable sources, a plan to improve the topographic, geologic, and geophysical mapping of the U.S., and recommendations to streamline the mining permitting process.

Steven Fortier, director of the National Minerals Information Center at the U.S. Geological Survey (USGS), testified that the USGS Mineral Resources Program has already submitted a report on a proposed mapping plan that will be wrapped into the larger report stipulated by the executive order. The new generation of geological, geophysical, and topographic maps, part of the administration’s proposed Three Dimensional mapping and Economic Empowerment Program (3DEEP), would be compiled at a scale appropriate for assessing critical mineral resources for mining, which would also support work on other natural resources and urban planning. Fortier also clarified that the current critical minerals list is finalized but will be revisited periodically in the future, although a specific timeline has not yet been established.

In her opening statement, Senator Murkowski highlighted the “serious but needless” vulnerability in the U.S. critical mineral supply chain. Senator Murkowski stated that the U.S. supplies of twenty-one critical minerals are entirely imported and emphasized that the nation’s dependency on foreign imports has doubled in the past few decades. Much of the U.S. supply of critical minerals comes from China, a point of concern addressed at the hearing by Senators Murkowski and Ron Wyden (D-OR), who highlighted the nation’s current trade tensions with China and China’s previous record of selectively blocking rare earth element exports to Japan during a dispute in 2010. Senator Wyden also highlighted the Critical Minerals Policy Act of 2013 (S. 1600), a bill which he cosponsored in a previous session of Congress, as an example of bipartisan legislation seeking to address this issue. Senator Murkowski also expressed concern over the administration’s fiscal year 2019 request to eliminate funding for the Department of Energy’s Critical Minerals Institute.

During the hearing, some committee members and witnesses suggested emerging components of the U.S. critical mineral supply portfolio to include reclamation from coal slag, improved recycling, and the development of alternative technologies less dependent on critical minerals. Dr. Roderick Eggert of the Critical Materials Institute advised that, while there are not currently many systems in place for critical mineral recovery, now is the time to develop collections systems, sorting systems, and processing technology so that recycling can play a larger role in the future. Furthermore, witnesses noted the importance of improving mineral processing capacity in the United States, since better mining capacity and other alternatives alone would not resolve the vulnerability of the nation’s critical mineral supply chain. Witnesses also discussed the need to support a robust and capable workforce.

Source: Federal Register; U.S. Senate, Committee on Energy and Natural Resources.