

**Testimony of
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Interior
before
the House Committee on Natural Resources, Subcommittee on Energy and Mineral
Resources
on H.R. 7662, Critical Minerals Security Act of 2024 and H.R. 7807, Intergovernmental
Critical Minerals Task Force Act**

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Chairman Stauber and Ranking Member Ocasio-Cortez, thank you for inviting me here today to discuss legislation pending before the Subcommittee. My name is Colin Williams, and I lead the U.S. Geological Survey's (USGS) Mineral Resources Program.

Background

The USGS is the science arm of the Department of the Interior and provides impartial, actionable science and data on the energy and mineral resources that underpin the Nation's technological innovation, manufacturing industries, trade, national security, and economy. As part of that role, we provide the Nation's official statistics on the domestic and global supply of mineral commodities; map and quantify the Nation's mineral resources; and provide supply chain analyses that inform both policy decisions and Federal and private sector investment. We also co-chair the National Science and Technology Council's (NSTC) interagency Critical Minerals Subcommittee, which was created in 2010 and codified in the Bipartisan Infrastructure Law.

The USGS Role in Critical Minerals Security

Within the Critical Minerals Subcommittee, the USGS role has been to work across federal agencies to provide the data and supply chain analyses to quantify and model criticality, and to maintain a cross-sectoral focus that could identify commodities with potentially competing supply needs across multiple industries. This interagency approach was implemented by the USGS to develop the 2018 list of critical minerals under Executive Order 13817, A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals.

The Energy Act of 2020 further directed the USGS to update both the methodology and the resultant list of critical minerals every three years, beginning with the 2022 list of critical minerals. The Energy Act provided a process for the update that includes interagency consultation and public comment. It defined "critical minerals" as non-fuel minerals essential to the U.S. economy or national security with a supply chain that is vulnerable to disruption and serving an essential function in the manufacturing of a product, the absence of which would have significant consequences for the economic or national security of the United States.

In accordance with the Energy Act of 2020, the 2025 list will include an updated methodology to determine mineral criticality. The methodology will incorporate a data-driven modeling approach

to evaluate potential risks to mineral supply chains. The USGS is incorporating supply disruption scenarios into the methodology to better represent possible future risks to supply chains and to estimate the potential effects of such disruptions to U.S. gross domestic product (GDP). For example, recent work completed by the USGS using elements of the updated methodology shows that in the scenario of a complete suspension of gallium and germanium exports from China, the world's largest producer, U.S. GDP could be reduced by \$3.4 billion.

The list of critical minerals is the foundation of work completed by the USGS to support resilient mineral supply chains under Executive Order 14017 (America's Supply Chains) and Executive Order 14123 (White House Council on Supply Chain Resilience). In addition to identifying critical minerals, the research results published with the list identify those critical mineral commodities with the greatest supply chain vulnerability and highlight weak points in supply chains.

The USGS, working with partners both inside and outside of government, has built comprehensive supply chain analysis capabilities to identify domestic and international critical mineral supply chain vulnerabilities from extraction to processing, manufacturing, disposal, and recycling or reprocessing waste.

Through our Earth Mapping Resources Initiative (Earth MRI), we are working with State geological surveys and other partners to collect modern geoscience data across the Nation and develop new maps and assessments of critical mineral resources. We are collaborating with the Defense Advanced Research Projects Agency (DARPA) and the Advanced Research Projects Agency-Energy (ARPA-E) to deploy artificial intelligence and machine learning techniques to accelerate the use of Earth MRI data to map and quantify the Nation's mineral resources. We are also working with Geoscience Australia and the Geological Survey of Canada through the Critical Minerals Mapping Initiative to advance the mineral system science that supports these analyses. We are also developing the first National Mine Waste Inventory to ensure that our understanding of the domestic resource base includes both minerals still in the ground and mineral resources in mine waste and energy waste.

We have expanded our annual Mineral Commodity Summaries to provide additional data on import reliance and on recycling, and we are active in providing technical information and reviews to other Federal agencies in support of funding decisions on proposed grants, loans, and tax code changes focused on critical mineral production and processing, as well as new technologies that could reduce reliance on critical minerals. We have also supported the Administration and Congress with extensive analysis on mineral commodity-related issues, such as those resulting from China's imposition of export controls on antimony, gallium, germanium, and graphite.

We are also partnering to improve the Nation's ability to forecast mineral supply chain disruptions. The USGS and the Energy Information Administration (EIA) have launched a collaboration in which EIA will develop outlooks for specific energy technologies such as electric vehicle batteries, which the USGS may then incorporate into its cross-sectoral supply chain analyses. In turn, the USGS will populate those outlooks with mineral requirements and market information.

H.R. 7662, Critical Minerals Security Act of 2024

This bill requires the Secretary of the Interior to submit a report to Congress on all global critical mineral and rare earth element resources and associated operations one year after enactment and every two years thereafter. These reports are required to be comprehensive with respect to ownership and activity at the individual mine and processing facility level, particularly with respect to the degree to which these operations are associated with foreign government ownership and/or influence. The bill also requires input on strategies to develop advanced mining, refining, separation, and processing technologies. The USGS supports this bill.

Much of the information needed for this report is already compiled in the USGS Mineral Commodity Summaries, Mineral Yearbooks, and Mineral Industry Surveys, although we note that for some critical mineral commodities the level of detail required for this global resource report will be difficult to acquire for markets which are not fully transparent.

We will continue to work to acquire additional resources to improve our ability to access this information. For example, we are partnering with the Defense Advanced Research Projects Agency (DARPA) to develop tools to increase the transparency of critical mineral pricing and improve the timeliness and accuracy of critical mineral supply and demand forecasts. Also, the President's Budget Request for Fiscal Year 2025 includes an additional \$5.6 million to expand and accelerate our critical minerals supply chain analysis. This increase will improve our ability to track changes in the global minerals markets and model the economic impact of time-critical mineral supply chain disruptions. In addition, USGS is investing in more fully engaging with the U.S. federal statistical system that over time may strengthen confidentiality protections for private sector and public engagement on minerals data.

These improved supply chain analysis capabilities, along with the other key components of the USGS Mineral Resources Program and its partnerships described above, will support a comprehensive, innovative, and strategic approach to developing advanced mining, refining, separation, and processing technologies.

H.R. 7807, Intergovernmental Critical Minerals Task Force Act

This bill would establish an intergovernmental critical minerals task force to assess the reliance of the United States on the People's Republic of China and other covered countries for critical minerals and the associated national security risks. It intends to bring together the Federal Government, Tribes, and State, local, and territorial governments to make policy recommendations with regard to critical minerals and to facilitate cooperation, coordination, and mutual accountability among all levels of government on a holistic response to U.S. dependence on covered countries for critical minerals.

The USGS recognizes the need to prioritize and address certain challenges to critical mineral supply chains and appreciates Congressional engagement on this issue. The USGS can support the effort of such an intergovernmental task force with our official statistics and supply chain analyses on the supply, demand, and trade of critical minerals and through our role as co-chair of the NSTC interagency Critical Minerals Subcommittee.

Implementation of the bill may be slower than intended by the bill's authors due to possible procedural requirements under the Federal Advisory Committee Act (FACA). As one possible alternative, this subcommittee might wish to consider directing the existing NSTC Critical Minerals Subcommittee to carry out the work envisioned under this bill. The NSTC Critical Minerals Subcommittee is a standing body authorized by statute, and thus may be in the nimblest position to rapidly stand up collaborative input processes with states, Tribes, local, and territorial governments, and deliver the recommendations called for in the bill.

Conclusion

Thank you again for the opportunity to testify. I will be happy to answer any questions.