

**Statement of  
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Interior**

**before**

**the House Committee on Natural Resources, Subcommittee on Energy and Mineral  
Resources**

**on**

**H.R. 6395, Recognizing the Importance of Critical Minerals in Healthcare Act of 2023,  
H.R. 8450, Phosphate and Potash Protection Act of 2024, and H.R. 8446, To amend the  
Energy Act of 2020 to include critical materials in the definition of critical mineral, and for  
other purposes**

**June 4, 2024**

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) national 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 are the primary source of statistics on the domestic and global supply of mineral commodities; map and quantify the Nation's mineral resources; and provide supply chain analyses informing both policy decisions and Federal and private sector investment. We also co-chair the National Science and Technology Council's interagency Critical Minerals Subcommittee, which was created in 2010 and authorized in the Bipartisan Infrastructure Law.

**The Energy Act of 2020 and the USGS Role in Designating Critical Minerals**

An early accomplishment of the Critical Minerals Subcommittee was to bring together the Federal agencies' existing definitions of critical, strategic, and other important mineral commodities and develop a whole-of-government approach to mineral criticality. The USGS' role was to provide the data and supply chain analysis 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 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).

As directed by the Energy Act of 2020, the USGS is developing multiple approaches to forward-looking supply chain analysis. We have expanded our annual Mineral Commodity Summaries to provide additional recycling data, and we are developing the 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 are developing five-year projections of production capacity for publication later this year as part of a global minerals outlook. In addition, we have analyzed scenarios including earthquake risks to specific countries’ copper production and processing, the 2010 tsunami’s effects on Japanese mineral processing, potential disruption to Russia’s supply of six mineral commodities, and the potential impacts of the People’s Republic of China (PRC)’s 2010 threat to cut off rare earth supplies.

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 is to develop outlooks for specific energy technologies such as electric vehicle batteries, which may be incorporated into USGS cross-sectoral supply chain analyses; and the USGS is to populate those outlooks with mineral requirements, market information, and analysis. The USGS is also 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.

The President’s Budget for Fiscal Year 2025 includes an additional \$5.6 million to expand and accelerate our critical minerals supply chain analysis. This increase will accelerate our ability to model the economic impact of time-critical mineral supply chain disruptions for events ranging from earthquakes to pandemics. Such modeling is in significant demand. For example, over the past year, USGS has provided the Administration and Congress extensive analysis on mineral commodity-related issues resulting from the PRC’s imposition of export controls on gallium, germanium, and graphite. In addition, we are restructuring our Mineral Resources Program to support an application to the Office of Management and Budget for formal designation of the USGS National Minerals Information Center as a principal statistical unit within the Federal Statistical System. The President’s Budget for Fiscal Year 2025 specified that USGS intends to seek this designation and includes a budget restructure that supports the designation.

## **H.R. 6395, Recognizing the Importance of Critical Minerals in Healthcare Act of 2023**

This bill would add the Department of Health and Human Services (HHS) to the list of agencies that the Department of the Interior consults with in designating critical minerals. The USGS supports this bill. A particular strength of the Federal government's approach to critical mineral issues is the effectiveness of interagency collaboration through the Critical Minerals Subcommittee. This interagency input has contributed greatly to cross-sectoral approach to the list of critical minerals. The USGS would welcome the opportunity to broaden these collaborative relationships by working with HHS to further ensure a broad cross-sectoral perspective is reflected in the list.

## **H.R. 8450, Phosphate and Potash Protection Act of 2024**

This bill would require an evaluation, in consultation with the Secretary of Agriculture, of the potential to designate as critical minerals potash, phosphate, and other minerals used in the production of fertilizer. In addition, the Secretary of the Interior would be required to evaluate policies related to the permitting and leasing of exploration, development, and production projects for these minerals. As the USGS does not issue permits or leases or direct economic policy, our testimony focuses only on the critical mineral evaluation portion of this legislation.

The USGS recognizes that potash and phosphate are essential to the U.S. economy, particularly the agricultural sector, but they did not meet the quantitative threshold for inclusion in the 2022 list of critical minerals because more than 75% of potash imports and 80% of phosphate imports come from reliable trading partners. All non-fuel minerals and their supply chains, including both potash and phosphate, will be evaluated as part of the analysis that informs the 2025 list of critical minerals. In that light, the legislation is not necessary because an evaluation of these minerals is already planned. That said, we would like to work with the Subcommittee to ensure the timelines in the legislation align with the ongoing work developing the 2025 list.

The USGS also studies other aspects of these essential minerals. Through the Earth Mapping Resources Initiative (Earth MRI), the USGS is actively studying the potential for critical mineral extraction from phosphate mine waste, and a USGS team recently published a resource assessment for potash in the Elk Point Basin, which spans the U.S.-Canada border, including parts of Montana and North Dakota.

## **H.R. 8446, To amend the Energy Act of 2020 to include critical materials in the definition of critical mineral, and for other purposes**

This bill would require inclusion of critical materials for energy technologies, as designated by the Department of Energy (DOE), in the list of critical minerals developed by the USGS. As a possible way to manage the two lists, the USGS supports this bill. We would, however, appreciate the opportunity to work with the Subcommittee to ensure the legislation protects the scientific basis of the component lists.

## **Conclusion**

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