Administration Releases Critical Minerals Strategy

GSA Speaking of Geoscience

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The Trump Administration released *A Federal Strategy to Ensure a Reliable Supply of Critical Minerals* on 4 June 2019. The strategy assesses the supply chain of critical minerals and identifies ways to strengthen the supply chain through recycling, reprocessing, and identifying alternative minerals and materials, diversification of the supply chain through trade with allies and partners, and streamlining the permitting and review process. The strategy also outlines a plan to identify new mineral resources within the Nation through mapping efforts.

Map of Countries that the U.S. is important reliant for more than 50% of a mineral commodity. Image credit: usgs.gov

The report states that less than 18% of the U.S. is mapped at a scale to determine mineral resources and calls for the U.S. Geological Survey (USGS) alongside other federal agencies to develop domestic maps at scale and resolution to identify domestic mineral sources. Furthermore it directs the USGS to advance research and development across critical mineral supply chains, and grow the domestic critical minerals workforce.

The report originated in Executive Order 13817, *A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals*, issued on 20 December 2017. In addition to directing the Department of Commerce to develop a strategy to reduce the reliance on critical minerals, the Executive Order directed the Department of the Interior (DOI) to identify critical minerals, defined as minerals that are essential to the economic and national security of the U.S.

Pursuant to the Executive Order, the DOI released a list of 35 minerals the USGS identified as critical minerals based on these methods. This list includes: aluminum, antimony, arsenic, barite, beryllium, bismuth, cesium, chromium, cobalt, fluorspar, gallium, germanium, graphite, hafnium, helium, indium, lithium, magnesium, manganese, niobium, platinum group metals, potash, the rare Earth elements group, rhenium, rubidium, scandium, strontium, tantalum, tellurium, tin, titanium, tungsten, uranium, vanadium, and zirconium. A draft of this list was released in February of 2018 and received over 450 public comments; following review of the comments the DOI found their methods and subsequent identification of the 35 minerals as critical valid and finalized the list 18 May 2018. For 31 of these 35 minerals the U.S. is more than 50% import-reliant and for 14 of the 35 minerals the U.S. is 100% important-reliant. China and Canada are the two leading countries that the U.S. is import-reliant upon. The USGS is to review this list every two years.

The USGS is investing in critical minerals with a new initiative. The FY 2019 budget included $9.6 million and the Administration's budget request for FY 2020 includes $10.6 million for the USGS's Earth Mapping Resource Initiative (Earth MRI) which is a partnership effort to combine geophysical, geological, and topographical mapping to identify areas of potential mineral deposits. This data will be made publicly available and will also have utility for identifying floodplains, hazards, and energy resources.

The Bureau of Land Management (BLM) and the U.S. Forest Service are to reform the review and permitting process within a year.

Congress has been weighing in with hearings and legislation. Rep Amodei (R-NV) introduced H.R. 2531, the National Strategic and Critical Minerals Production Act, which aims to increase domestic production of critical minerals by making the review and permitting process more efficient with a time limit of 30 months for the mine permitting process. At a subsequent House Natural Resources Subcommittee on Energy and Mineral Resources hearing, *Uranium Mining: Contamination and Critically*, on 25 June 2019, members discussed H.R. 3405, the Removing Uranium from the Critical Minerals List Act, and were divided on the inclusion of uranium as a critical mineral as this would allow for this mineral to be included in the strategy's streamlined review and permitting process. These bills passed along party lines in the House Natural Resources Committee markup on 17 July 2019.

Sen. Lisa Murkowski (R-AK) introduced S. 1317, the American Mineral Security Act, which aims to grow the production of domestic mineral resources and improve the predictability of the review process and was discussed during the Senate Committee on Energy and Natural Resources hearing on 14 May 2019. S. 1317 directs the Secretary of the Interior in consultation with state

geological surveys to provide a national assessment of each of the critical minerals. The bill calls for theses assessment to include a quantitative and qualitative overview of domestic mineral resources that may require field assessments and mapping to complete. Sen. Joe Manchin (D-WV) introduced S. 1052, the Rare Earth Element Advanced Coal Technologies Act, which authorizes the Department of Energy's Office of Fossil Energy to develop technology for the separation and extraction of rare earth elements from coal byproducts. These bills passed through the Senate Committee on Energy and Natural Resources markup on 16 July 2019 alongside several other energy-related legislation.

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