Statement of
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before the
House Committee on Natural Resources
Subcommittee on Energy and Mineral Resources
on
H.R. 3405, the Uranium Classification Act of 2019

June 25, 2019

Good morning Chairman Lowenthal, Ranking Member Gosar, and Members of the Subcommittee. Thank you for the opportunity to provide the Department of the Interior's (Department) views on H.R. 3405, the Uranium Classification Act of 2019.

The Department manages one-fifth of the Nation's lands, as well as the Nation's offshore energy and mineral resources. These responsibilities include leasing and permitting activities for both onshore and offshore access to and development of the Nation's mineral resources, through the Bureau of Land Management (BLM) and the Bureau of Ocean Energy Management. The U.S. Geological Survey (USGS) conducts scientific research on how mineral resources form geologically, provides earth-science based assessments on the geologic potential for mineral commodity occurrences across the Nation and globe, and provides statistics on the worldwide supply, demand, consumption, and flow of mineral commodities essential to the Nation's economy and national security.

Background

Currently, the United States relies on other countries completely for more than a dozen minerals that are vital to our economy and security. These minerals are used for things such as cell phones, computers, defense systems, automobiles, airplanes, ships, and many other products that are critical to our economy and security.

On December 20, 2017, President Trump issued Executive Order 13817, "A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals." Pursuant to the Executive Order, the Federal Government delivered an interagency report which included:

(i) a strategy to reduce the Nation's reliance on critical minerals;

(ii) an assessment of progress toward developing critical minerals recycling and reprocessing technologies, and technological alternatives to critical minerals;

(iii) options for accessing and developing critical minerals through investment and trade with our allies and partners;

(iv) a plan to improve the topographic, geologic, and geophysical mapping of the United States and make the resulting data and metadata electronically accessible; and

(v) recommendations to streamline permitting and review processes related to developing leases; enhancing access to critical mineral resources; and increasing discovery, production, and domestic refining of critical minerals.

The Executive Order directed the Department of the Interior to lead several aspects of the report, with the Department of Commerce responsible for the overall report. Additional interagency contributions were coordinated through the White House Office of Science and Technology Policy's National Science and Technology Council (NSTC) Subcommittee on Critical and Strategic Mineral Supply Chains (now the Subcommittee on Critical Minerals).

The Executive Order directed the Secretary of the Interior, in coordination with the Department of Defense and in consultation with other executive branch agencies, to produce a list of critical minerals. Department of the Interior Secretarial Order 3359 directed the USGS, in coordination with the BLM and with broad Federal interagency input, to lead the development of the critical minerals list.

Identifying Minerals as "Critical"

Federal agencies and other organizations use a number of existing definitions and criteria to identify a material or mineral as "critical," "strategic," or otherwise important. The Executive Order defined a critical mineral as (i) a non-fuel mineral or mineral material essential to the economic and national security of the United States, (ii) the supply chain of which is vulnerable to disruption, and (iii) that serves an essential function in the manufacturing of a product, the absence of which would have significant consequences for the U.S. economy or national security.

To identify minerals meeting the definition of criticality under the Executive Order, the USGS used as a starting point a screening tool developed in 2016 and updated in 2017[1, 2] by the NSTC Subcommittee. The NSTC Subcommittee has representation from Federal Departments including, but not limited to, Defense, Interior, Energy, State, Commerce, and Homeland Security. This interagency engagement resulted in a tool that drew from the contributing agencies' existing prioritization processes, and represents a range of Federal agency missions and understanding of industries. The tool is a quantitative methodology for identifying and ranking mineral commodities based on widely accepted criteria published in the mineral commodity literature. Using that methodology, and several other sources of data, the USGS applied two principal quantitative criteria to evaluate minerals for inclusion on the draft list of critical minerals: the Herfindahl-Hirschman index, which measures country concentration of

[1] White House Office of Science and Technology Policy, National Science and Technology Council, 2016, "Assessment of critical minerals: screening methodology and initial application", https://www.whitehouse.gov/sites/whitehouse.gov/files/images/CSMSC%20Assessment%20of%20Critical%20Minerals%20Report%202016-03-16%20FINAL.pdf

[2] EA McCullough and N Nassar, 2017, "Assessment of critical minerals: Updated application of an early-warning screening methodology", in Mineral Economics 30(3), https://pubs.er.usgs.gov/publication/70191019

production, and the USGS net import reliance metric based on USGS's annual Mineral Commodities Summaries.[3]

The Secretary of the Interior published a draft list of critical minerals in the Federal Register on February 16, 2018,[4] accepted public comment for 30 days ending March 19, 2018,[5] and received more than 450 comments, which are available at regulations.gov. After reviewing the comments, the Department of the Interior finalized the list in a second Federal Register notice on May 18, 2018.[6] The list of critical minerals is finalized, but not permanent. It is dynamic and will be updated periodically to reflect current data on supply, demand, and concentration of production, as well as current policy priorities. The list consists of 35 minerals or mineral groups: Aluminum (bauxite), antimony, arsenic, barite, beryllium, bismuth, cesium, chromium, cobalt, fluorspar, gallium, germanium, graphite (natural), 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. Figure 1 attached provides an overview of these critical minerals' major uses at the sector level and trade dependencies at the country level.

This list of critical minerals does not include a number of economically significant minerals, such as copper, zinc, molybdenum, gold, silver; and industrial minerals such as phosphate rock, sand, gravel, and aggregates that are produced domestically in large quantities. Given current levels of domestic production, the United States is not highly reliant on imports for these minerals and typically has a combination of domestic reserves and reliable foreign sources adequate to meet foreseeable domestic consumption requirements. While these minerals do not currently meet the definition of critical, they are similar to critical minerals in that they are indispensable to a modern society for the purposes of national security, technology, infrastructure, and energy production from both fossil fuels and renewable energy generation.

Input from other agencies represented on the NSTC Subcommittee emphasized that uranium, while primarily used as a fuel mineral, also has important non-fuel uses related to national security, such as radiation shields, counterweights, and armor piercing kinetic energy penetrators, as well as medical applications such as medical isotope production. In addition, Energy Information Administration data indicate high production concentration and significant import reliance. Based on these factors, uranium meets the criteria for inclusion on the list.

Of the 35 minerals deemed critical, 12 are commodities recovered during the processing, smelting, or refining of a host material and are, therefore, deemed "byproducts." For example, rhenium is recovered as a byproduct of smelting copper-molybdenum ores. Similarly, helium is a byproduct of natural gas production.

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[3] The methodology used by the USGS is published in USGS Open-File Report 2018-1021, https://pubs.usgs.gov/of/2018/1021/ofr20181021.pdf

[4] Draft List of Critical Minerals, 83 FR 7065, https://www.federalregister.gov/documents/2018/02/16/2018-03219/draft-list-of-critical-minerals

[5] Comments received are available at https://www.regulations.gov under docket DOI-2018-0001.

[6] Final List of Critical Minerals 2018, 83 FR 23295, https://www.federalregister.gov/documents/2018/05/18/2018-10667/final-list-of-critical-minerals-2018

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The bill, as proposed, would remove uranium from the Administration's final list of critical minerals. In my testimony I have explained the reasoning behind its inclusion. The Department believes its inclusion is merited, and therefore opposes the legislation.

Conclusion

On June 4th the Administration released "A Federal Strategy to Ensure a Reliable Supply of Critical Minerals[7]." The strategy directs the Department to locate domestic supplies of those minerals, ensure access to information necessary for the study and production of minerals, and expedite permitting for minerals projects. The USGS is supporting the strategy through our minerals science and mineral information.

Thank you for the opportunity to testify on the important subject of critical minerals. I will be happy to answer any questions.

[7] https://www.commerce.gov/news/reports/2019/06/federal-strategy-ensure-secure-and-reliable-supplies-critical-minerals