September 23, 2025

Dr. Sarah Ryker, Acting Director
U.S. Geological Survey
12201 Sunrise Valley Drive
Reston, VA 20192.

RE: Comments on 2025 draft List of Critical Minerals [Docket Number USGS-2025-0039; GX25GB00PAMR000]

Dear Dr. Ryker,

The National Foreign Trade Council ("NFTC") appreciates this opportunity to respond to the U.S. Geological Survey's ("USGS") request for public comment regarding the 2025 draft List of Critical Minerals, which was published in the Federal Register on August 26, 2025.

Overview:

NFTC notes the importance of the U.S. Critical Minerals List to U.S. national security and trade policy. Earlier this year, NFTC provided comments and recommendations, reiterated below, to the Secretary of Commerce on their investigation into the national security implications of critical minerals and rare earth elements (REE) imports.

We write in support of the administration's national security goals, including achieving energy dominance. Ensuring the continued competitiveness of U.S. technology and manufacturing companies is a key aspect of these goals, and many U.S. companies rely on access to critical minerals for their manufacturing operations. Enhancing the security of critical mineral supply chains is central to national security.

Responding to the USGS' request to comment on the inclusion of Metallurgical Coal and Uranium:

Metallurgical Coal: Steel production, which is the primary use for metallurgical coal is necessary for defense and commercial products. While steel is less commonly used compared to aluminum and other alloys in aerospace products, a strong domestic steel industry, along with investment in upstream material production, is necessary to maintain our national security. The U.S. maintains a significant number of mines for metallurgical coal and no immediate impact is expected, but declining investment in capacity over time may impact downstream production of domestic steel, leading to greater import reliance, which in turn could over time reduce the resiliency of the supply chain.

Uranium: The U.S. is vulnerable to a disruption in uranium supplies if it needs to rely on domestic capacity, and our nuclear facilities and fleet require more uranium than is produced annually. While Canada is a significant producer, if relying on White Mill, which is the only remaining U.S. conventional uranium mill, we remain vulnerable to supply disruption and lack resiliency in the domestic industry.

Supporting the continued inclusion of Barite on the 2025 Critical Minerals List

Barite: The Department of the Interior declared Natural Barium Sulfate ("barite") as a critical mineral in 83 FR 23295 (5/18/2018) Final List of Critical Minerals 2018. We further note that the USGS included barite in their Draft List of Critical Minerals (90 FR 41591) issued on August 26, 20258/26/2025. NFTC continues to support the inclusion of Barite as a critical mineral for the following reasons:

- Natural Barium Sulfate (Barite) is an irreplaceable product; it is used as a weighting agent on 95% of the wells drilled in the U.S., including large offshore projects in the Gulf of America. 75% of global Barite usage is as a weighting agent in drilling fluids for oil and gas exploration. Alternative minerals for weighting agent application are cost prohibitive and typically metallic in nature, which decreases drilling productivity.

- Barite mines in the U.S. have been substantially depleted and are inadequate in quality and production to support the U.S. market. There are no new domestic mines open with significant reserves to reduce U.S. import reliance for this strategic mineral.

Requesting reconsideration of the proposed removal of Tellurium from the 2025 Critical Minerals List

NFTC notes that the USGS proposes to remove Tellurium from the 2025 Critical Minerals List. We note that the U.S. produces a significant portion of the world's supply of Tellurium, as do countries with whom the U.S. maintains friendly trade relationships. The risk of immediate and near-term supply chain shortages appears to be unlikely. However, demand for Tellurium is projected to continue and even accelerate from its current upward trajectory. Moreover, U.S. production of Tellurium is limited to a single location in Texas. This dependency on a sole source for Tellurium may result in supply chain disruptions. Tellurium is used primarily in the production of photovoltaic solar cells, which is vital to clean energy. Tellurium is also used to produce alloys and electronics, including militarily significant items.

Identifying additional elements for inclusion on the 2025 Critical Minerals List

NFTC respectfully seeks inclusion of the following elements as Critical Minerals:

Boron: Has proven to be a versatile substitute for titanium. It has broad military applications as well as in pharmaceutical products. Boron is also used in agriculture and consumer

products. It is a key ingredient in fertilizer and is used to produce borosilicate glass for flat panel displays.

National Security implications: Modernizing the U.S. military is a priority. Effective military modernization must incorporate the use of novel materials in innovative ways to ensure force projection and minimal risk to U.S. forces. Boron is used in a wide range of military applications, including.

- Armored Protection: Boron carbide, an extremely hard material, is used in lightweight, durable ceramic plates for personal protective equipment and vehicle armor, offering superior defense against high-velocity projectiles.

- Materials Science: Boron enhances the hardness and toughness of steel alloys, making them ideal for military hardware. It is also used in composite materials, such as boron fibers, for advanced aerospace components and aircraft structures.

- Fuels and Missiles: Boron powder is a key component in slurry fuels for military aircraft and missile programs. Boron-based propellants also form protective coatings on steel, reducing oxidation.

- Nuclear Shielding: Boron carbide is an effective material for nuclear shielding in military applications.

- Military Tools: Its exceptional hardness makes boron an ideal choice for armor-piercing projectiles and specialized cutting tools used in military operations.

Looming Supply Risks: The U.S. has one company that mines and processes Boron domestically. However, the Boron reserves at this mine are expected to be depleted within the next 5–10 years. Once this happens, the global Boron market will face a near-monopoly. Eti Maden, a Turkish supplier, will dominate the market with over 95% market share, leaving only a small fraction to a handful of minor, non-U.S. suppliers. This monopolistic scenario is likely to exacerbate cost pressures and heighten the risk of supply disruptions due to potential shortages.

Molybdenum: China restricted the export of Molybdenum earlier this year. Molybdenum is used in aerospace alloys and some high-end electronics in small amounts as a hardener. While only a few percent of the total weight of the products, this material does not have any easy substitutions. While the U.S. is not as import dependent on molybdenum as some other materials, China still produces a high proportion (42%), which makes the US more vulnerable to supply disruptions. While the US has some self-sufficiency with molybdenum, and other friendly countries like Canada also produce a significant amount, the fragility of this supply chain argues for the inclusion of Molybdenum on the USGS' 2025 Critical Minerals List.

Recommendations

NFTC reaffirms our recommendations made in response to the Commerce Department's ongoing Sec. 232 national security investigation into imports of critical minerals and rare earth elements. We support this Administration's recent initiatives to strengthen domestic production of processed critical minerals, including Executive Order 14241, "Immediate Measures to Increase American Mineral Production", which includes authorizing the International Development Finance Corporation ("DFC") to provide loans and establish a fund to support projects to increase domestic production capacity. Executive Order 14285, "Unleashing America's Offshore Critical Minerals and Resources", also seeks to boost domestic access to and production of strategic natural resources, including critical minerals found in the seabed.

We continue to advocate for continued engagement with allies and like-minded trading partners through the U.S. commitment to and active involvement in the Minerals Security Partnership (MSP) and dialogues with members of the affiliated MSP Forum. We further recommend the following actions:

- **Negotiating Strategic Critical Mineral Trade Agreements.** Negotiate deals and strategic partnerships with mineral-rich, trusted allied countries, including Australia, Chile, Canada, and the Philippines, to secure access to critical minerals/REEs. In the past, the U.S. has negotiated Critical Minerals Agreements with foreign countries, such as Japan, and most recently, with Ukraine. However, since most countries lack the necessary refining infrastructure to process critical minerals into a usable form for manufacturing derivative products, the U.S. must also promote non-China processing capabilities on a large scale by developing processing partnerships with allies to build refining, smelting, recovery, and recycling capabilities. These agreements should include dedicated supply commitments, right of first offer provisions, and long-term joint development of refining and recovery infrastructure. In geopolitically sensitive regions, including Taiwan, Vietnam, and the Philippines, the U.S. could leverage broader security and defense funding to diversify and increase the resiliency of the processed critical mineral supply chain. An incentive-based framework would reinforce international cooperation and promote secure supply chain practices.

- **Establishing Strategic Stockpiles.** Establish a national reserve of processed critical minerals essential to the AI supply chain. The stockpile should have clear thresholds based on multi-sector demand (e.g., defense, AI infrastructure). We recommend establishing public-private partnerships to identify and forecast priority processed critical minerals. While stockpiling is not a long-term solution, it can serve as a safety net to mitigate supply disruptions during the transition to alternative, processed critical mineral sourcing.

- **Investing in Critical Mineral Recovery and Substitution Technologies.** Invest in critical mineral recovery and substitution technologies and critical mineral processing capabilities through research and development (R&D) funding, tax incentives, and public-private partnerships. The R&D should focus on extracting critical minerals from end-of-life components (e.g., neodymium from HDD magnets) and reintegrating them into derivative product manufacturing. Coordinate these efforts with allied country trade agreements to develop shared processing and recovery capabilities. Similar investments are necessary to accelerate the development and commercialization of viable substitutes for critical minerals where possible. These initiatives will strengthen domestic and allied supply chains.

About NFTC

The NFTC, organized in 1914, is an association of U.S. business enterprises engaged in all aspects of international trade and investment, including maintaining competitiveness and technological leadership. Our membership covers the full spectrum of industrial, commercial, financial, and service activities, accounting for over $6 trillion in revenue and employing nearly six million people in the United States.

Thank you for your consideration of our comments. We welcome the opportunity to provide additional information and address any questions you may have. Please contact us at jchu@nftc.org or (703) 225-8519.

Sincerely,

Jeannette L. Chu
Vice President, National Security
Policy and Executive Director
Alliance for National Security and
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cc: Jeffrey Kessler
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Jamieson Greer
United States Trade Representative