Opinion – The Defense Production Act, COVID-19 and Critical Minerals

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As the Coronavirus continues to demonstrate the fragility of commodity supply-chains, further use of the Defense Production Act (DPA) could allow for the United States to develop its domestic critical mineral sources. Mining and processing locations across the world are being disrupted and highlight the United States' heavy reliance on imported critical minerals. With the announcement earlier this week that the Health and Human Services Department finalized over a billion dollars' worth of contracts with General Motors and Royal Phillips, it is clear that the DPA can be a useful tool for addressing large material gaps for the collective benefit of the nation.

According to FEMA, "The Defense Production Act is the primary source of presidential authorities to expedite and expand the supply of materials and services from the U.S. industrial base needed to promote the national defense."

The DPA was created to help manage U.S. mineral and metal industries. It has evolved over time. Under 50 U.S.C. §4533, Section 303 of the DPA, the President is explicitly granted authority to address the mining and production of minerals that are considered essential to the nation's security. The use of DPA in this context stems from its initial congressional approval in the 1950s, when President Truman regulated steel and mining production to ensure adequate supply for the Korean War. Following this, the act was used again during the Cold War to establish aluminum and titanium industries within the United States, as foreign reliance was not considered a viable strategy. The DPA provided capital investments, research funding, interest free loans, the streamlining of permitting processes, and even skilled laborers.

COVID-19 has clearly shown that we are still susceptible to material shortages—protective equipment being an important example. Yet, even before the pandemic, the U.S. government has been aware that shortages of critical minerals can create significant problems for defense strategies, renewable technologies, and the economy in general. In response, they have spent the last few years creating critical mineral policies that can work well with the DPA. For domestic production to be regulated, materials must first be officially classified as essential to the security of the United States. For critical minerals, this process was finalized from 2017- 2018 under Executive Order 13817. With the order, the United States created a Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals, and a list of 35 mineral commodities explicitly labeled as "essential to the economic and national security". The strategy recommends six actions, some of which are possible to transact through the DPA, including:

1. Advance Transformational Research
2. Strengthen America's Critical Minerals Supply Chains
3. Enhance International Trade and Cooperation
4. Improve Understanding of Domestic Critical Mineral Resources
5. Reduce Federal Permitting Timeframes
6. Grow the American Critical Minerals Workforce

As it stands, of the 35 mineral commodities listed as essential for U.S. economic and national security, China is the top producer or top supplier for 23 of them. For some of these minerals, such as rare earths, China controls 90% of the global supply and the U.S. is 100% import reliant. And while journalists are quick to point out that "rare earths just

aren't that rare" in response to unofficial threats made by China, domestic production of these minerals often isn't that simple.

For rare earths specifically, the Mountain Pass Mine in California has struggled for decades to provide even a steady supply of unrefined rare earth concentrates. Its storied history involves multiple shutdowns, at one point being the only major source of rare earths worldwide, bankruptcies, and the owner funding an idle $300,000,000 building referred to by current employees as the "crack house". It is now producing a steady supply of concentrates, but it still has to ship them to China for processing into usable products. Unfortunately, this transaction often involves heavy tariffs from President Trump's trade war, and still gives China ultimate control over rare earth supplies.

Aware of these dependencies, COVD-19 has renewed interest in legislation to address U.S. critical mineral needs. House and Senate staff began by discussing a push to adopt the American Mineral Security Act. The act would help shore up supply chains with the understanding that the ability to limit future crises is intrinsically tied to the materials needed for clean energy, national defense, and health care. Similarly, a letter signed by members of the Congressional Western Caucus is using the pandemic to warn that relying on foreign sources for critical minerals is a "national security threat", and that domestic production is a "national security imperative". The Department of Energy has also chosen this time to announce that it will provide $18 million for research to ensure the continued availability of critical minerals or their effective substitutes.

Without clear policy to give the mining industry a comprehensive understanding of America's material needs, it is unlikely that the United States will be able to achieve mineral security. Through the current pandemic and numerous mine closures across the world, the nation is gaining an understanding of its potential material shortcomings. At the same time, interest in U.S. mining projects is failing. Large investment firms are announcing that they will avoid high-carbon projects, and rating indices are starting to report that the mining and metals industry has higher environmental and social risks than oil and gas production. Combined with the 20 years it takes to open a mine, it is clear that the United States needs to start implementing its critical minerals strategy. Even if the DPA is not used for billion-dollar mining contracts, the possibilities of permitting reform, materials research, and an understanding of potential domestic capabilities, are all avenues that should be explored.

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