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Testimony of Aaron Mintzes, Senior Policy Counsel, Earthworks Before the U.S. Senate Energy and Natural Resources Committee

The Department of Interior's Final List of Critical Minerals for 2018 and Opportunities to Strengthen the United States' Mineral Security July 17, 2018

Thank you, Madam Chair, Ranking Member Cantwell, and Members of the Committee, for the opportunity to testify before you on the Department of Interior's Final List of Critical Minerals for 2018 and Opportunities to Strengthen the United States' Mineral Security.

My name is Aaron Mintzes, and I am Senior Policy Counsel at Earthworks. We are a non-profit organization dedicated to protecting communities and the environment from the destructive impacts of mineral and energy development, while seeking sustainable solutions. We work closely with a broad coalition of governments, Native Americans, citizen groups and other conservation organizations to improve policies governing hardrock mining and oil and gas development.

In December 2017, President Trump issued an Executive Order on a Federal Strategy to Ensure and Secure Reliable Supplies of Critical Minerals (EO).ⁱ The policy recommendations flowing from that EO are due to the President in November. We are deeply concerned about any critical minerals policy that attempts to limit the scope of environmental reviews or undermines public input in our government's mining decisions.

We understand that metals are important and used in the manufacture of items we use every day, including minerals needed to ensure a swift transition toward renewable energy. Yet, simply because we designate a mineral as critical does not mean we need more mining, or mining with fewer environmental safeguards. This is particularly important given the harms and costs mining has on communities and the environment. Extracting minerals damages water quality, frequently forever. No critical minerals policy should weaken community and environmental protections.

Critical Minerals Are Internationally Traded Commodities Often Owned by Foreign Companies

Securing our supply of critical minerals has little to do with domestic mining. Supply chains, refining and product manufacturing occur globally. This arrangement allows for greater efficiency, creating lower costs for consumers. A number of allied countries like Australia, Canada, Chile, and India have both available critical mineral supply and refining capacity.

Import dependence only matters when it accompanies a high risk of a supply chain disruption and no available alternatives. Yet, among the minerals the United States Geological Survey (USGS) designated as critical, our aluminum (bauxite) comes mainly from Jamaica. Our cesium, rubidium, magnesium, potash, and indium come from Canada. South Africa supplies us with chromium and platinum group metals (PGM). Mexico provides our fluorspar and Brazil provides our niobium. We mine geranium domestically and send it to Canada or Belgium for processing. Rhenium also comes from the United States and has robust global recycling. We have a helium surplus. One Utah mine produces 85% of global beryllium.ⁱⁱ

Our laws also allow foreign companies to control our minerals, via subsidiaries, such as the Mountain Pass mine, a rare earth mine, now owned by a Chinese consortium and the Stillwater mine

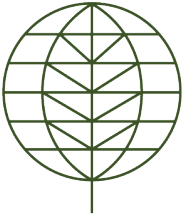
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in South African ownership, the nation's only platinum and palladium mine.ⁱⁱⁱ As a practical matter, minerals are internationally traded commodities on world markets often owned by foreign companies. Mining domestically does not guarantee the minerals stay here, usually minerals pass through many borders after extraction.

The best way to ensure a reliable supply of critical minerals is for the public and private sectors to invest in research, conservation, recycling, and substitution. The Department of Energy's research lab continues to provide valuable insights in an area still in great need of study. The Department of Defense maintains the National Defense Stockpile. This Committee has also passed legislation over the last few Congresses with provisions improving critical minerals research, recycling, workforce training, and supply chain management.

No Critical Minerals Policy Should Weaken the National Environmental Policy Act (NEPA); Securing Domestic Critical Mineral Supply Is Not About Permitting

Securing our critical mineral supply does not require any weakening of our environmental laws. Section 3(d) of the President's EO directs agencies toward "streamlining leasing and permitting processes to expedite exploration, production, reprocessing, recycling, and domestic refining of critical minerals."

Many communities affected by hardrock mining view permit "streamlining" as tantamount to removing environmental and community protections. We worry the Administration may justify limiting public comment, tribal consultation, environmental study and judicial review because critical minerals have defense or other applications. The Administration has added to these concerns with the Interior Department's critical minerals Secretarial Order^{iv} and the Council of Environmental Quality's (CEQ) proposed National Environmental Policy Act (NEPA) regulations revisions.^v

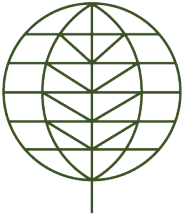
NEPA, often referred to as the environmental "Magna Carta", requires federal agencies to assess the environmental impacts of their actions.^{vi} For nearly fifty years, NEPA has provided certainty and predictability through a transparent process well understood by federal regulators, permit applicants, and affected communities.

NEPA ensures that Americans can take part in the review and development of projects affecting our social, economic, and environmental health. The process provides an opportunity for communities to learn about proposed mines and offers agencies the chance to receive valuable public input. And it works. Public input has improved agency consideration of project alternatives and resulted in better environmental outcomes.

NEPA also aids permit efficiency. According to the Government Accountability Office (GAO), the average time it takes the Bureau of Land Management (BLM) to permit a mine is two years - not ten, not even seven.^{vii} This period is competitive with most Western democracies with robust mining industries like Australia, Canada, Chile, and Norway. When a permit takes longer than average, often the reason is the low quality of information operators provide in their mine plans or the agencies' limited resources. Other times delays occur for perfectly legitimate reasons like changes in market conditions.

Ultimately, NEPA is a source of strength and predictability. It helps lay the foundation for a mining company's social license to operate (SLTO), which gives domestic mining a distinct competitive advantage. Other nations, like China, without this long-standing commitment to public input in mining decisions, remain relatively undesirable destinations for mining investment. NEPA lowers investment risk and reduces uncertainty as compared to jurisdictions without a similar public outreach process.

Mining companies benefit from the public participation process within NEPA. They could further benefit from joining the Initiative for Responsible Mining Assurance (IRMA), a multi-stakeholder and independently-verified responsible mining certification that improves social and environmental



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performance and creates value for mines.^{viii} When communities impacted by a proposed mine can voice their concerns, the mine can earn their SLTO.

There are some places not suitable for a mine. The proposed Pebble Mine would harm the world's largest wild salmon fishery in Bristol Bay. The Rock Creek Mine would tunnel underneath a Wilderness area and take endangered grizzly bears and bull trout. These projects are ill-advised and face steep opposition from local communities.

Mining should be balanced with other nearby land uses, which often generate longer lasting, sustainable economic activity. For instance, the outdoor economy — defined by bike, snow, trail and water sports as well as camping, fishing, hunting, motorcycling, off-roading and wildlife viewing — supports more than 7.6 million jobs and pays \$124.5 billion in federal, state and local taxes. Americans spend \$887 billion a year on outdoor recreation.^{ix} The value of hunting, fishing, recreation, sacred sites, pristine landscapes and clean water often outweighs that of the minerals.

Any critical minerals policy must account for these issues and the communities whose water and air mineral development could harm. Securing adequate critical mineral supply need not come at great cost to the environment and Americans in mineral-rich states.

The United States of America Is Among the World's Most Attractive Destinations for Mining Investment

Any critical minerals policy should also account for the fact that, according to the mining industry, the United States of America is among the world's best places to mine. Annually, the Fraser Institute, a center-right Canadian think tank, surveys mining executives asking where they prefer to invest.

Last year, the Fraser Institute ranked 91 national and subnational jurisdictions according to their mining investment desirability, accounting for both mineral potential and policy perception.^x For 2017 (the last year for which data is available), Nevada ranks 3rd, Arizona 9th, Alaska 10th, and Utah, 15th. China ranks 83rd.

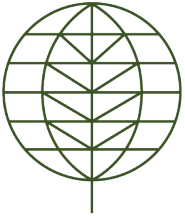
America owes our mineral investment attractiveness to three factors:

- 1) The strength and certainty of our democratic institutions
- 2) Our rich mineral endowment
- 3) Our uniquely permissive mining laws and regulations

Mining is risky business and mining companies crave certainty. Attention to the rule of law, commitment to transparency, functional government, strong capital markets, all contribute to this certainty. And the 1872 Mining Law, a statute still on the books from our nation's Manifest Destiny era of Westward expansion, still governs domestic mining.^{xi}

Existing Mining Laws Provide Regulatory Certainty for Permittees

The General Mining Law of 1872 considers mining the highest and best use of public lands, even where our public lands may be better suited for oil and gas drilling, coal mining, grazing, hunting, fishing, recreation, or conservation. Because of the 1872 Mining Law, mining wins. Federal land managers have limited to no discretion as to whether or not to grant a mine permit. For permit applicants seeking certainty, it does not get more certain than that. This nineteenth-century law robs twenty-first century Americans of the choice to select a different land use that competes with mining.



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It also grants mining companies easy access to the public's mineral wealth. To secure a mining claim, the miner needs to only discover a locatable mineral on public lands, stake a claim, and pay a one-time \$212 fee plus another \$155 annually. In exchange, they receive all the people's wealth below the surface without paying a dime in royalties to the taxpayer. Mining companies also receive generous tax breaks for capital investments and depleting our natural resources.

In addition to free and open access to these minerals, foreign and domestic mining companies benefit from our stable, predictable, fair, and open permitting process. Existing law provides the mining industry the certainty it needs, and NEPA provides the public outreach communities living near mines deserve. Limiting this well-established process or reducing meaningful public participation could actually undermine investment by revoking a company's SLTO.

Critical Minerals Policy Solutions Include Recycling, Reuse, Research, and Substitution

Any critical mineral policy must link with our rapid transition to 100% renewable energy. Critical minerals play an important role in our nation's emerging renewable energy industry and responsible sourcing of these minerals means clean energy can truly be clean, without some of the most harmful effects to water resources. Mining companies interested in getting in on the ground floor to make mining for renewable energy more responsible should consider seeking IRMA certification.

The voluntary IRMA process provides investors, governments, and mining impacted communities with a seal of approval that a mine follows responsible environmental, community, and sourcing practices. The standard could also be adapted not only to maximize recycling and reuse, but also to incentivize waste management practices that capture some of the byproducts on the Department of Interior's Critical Minerals List.

In addition to IRMA, the private sector can help conduct research and drive innovation. In Japan, Honda expects to recover 80 percent of rare-earth metals contained in some of their used nickel-metal-hydrate car batteries. In Germany, Siemens is researching recycling rare earths from electric vehicle motors.^{xii}

Congress and the Administration should also focus efforts on increasing funding for research, recycling, reuse, and alternatives. The Department of Energy leads a Critical Materials Institute with a \$120 million budget to research alternatives, reduce waste, and diversify production. West Virginia University has developed a pilot project designed to harvest rare earth minerals from the waste piles generated during abandoned coal mine reclamation.

Conservation, efficiency, recycling and substitution will each do more to ensure available supply of critical minerals than policy efforts that limit community input in mining decisions that affect their water and health. The United States should embrace innovation, demand best practices, and lead the world in responsibly securing our critical mineral supply while protecting our precious water resources.

Thank you for allowing us to share our views on this important issue.

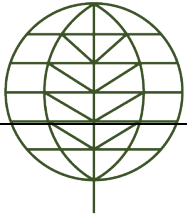
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- ⁱ 83 Fed Reg. 23295 (May 18, 2018).
- ⁱⁱ Schulz, K.J., DeYoung, J.H., Jr., Seal, R.R., II, and Bradley, D.C., eds., 2017, Critical mineral resources of the United States—Economic and environmental geology and prospects for future supply: U.S. Geological Survey Professional Paper 1802, 797 p., <http://doi.org/10.3133/pp1802>.
- ⁱⁱⁱ [Mountain Pass sells for \\$20.5 million](#) by Andrew Topf [Mining.com](#)
- ^{iv} Secretarial Order 3359, Department of Interior, (December 21, 2017)
- ^v CEQ Advanced Notice of a Proposed Rule Making (ANPRM) 40 CFR 1500-1508 Docket # CEQ-2018-0001
- ^{vi} 42 U.S.C. 4321 et seq. (1970)
- ^{vii} HARDROCK MINING: BLM and Forest Service Have Taken Some Actions to Expedite the Mine Plan Review Process but Could Do More [GAO-16-165](#): Published: Jan 21, 2016. Publicly Released: Feb 22, 2016.
- ^{viii} For more information on IRMA, please see <http://www.responsiblemining.net/>
- ^{ix} Outdoor Industry Economy Report (April 25, 2017), [Outdoor Industry Association](#)
- ^x Fraser Institute: [Annual Survey of Mining Companies 2017](#)
- ^{xi} See 1872 Mining Law 101 https://earthworksaction.org/issues/1872_mining_law_101/
- ^{xii} Van Gosen, B.S., Verplanck, P.L., Seal, R.R., II, Long, K.R., and Gambogi, Joseph, 2017, Rare-earth elements, chap. O of Schulz, K.J., DeYoung, J.H., Jr., Seal, R.R., II, and Bradley, D.C., eds., Critical mineral resources of the United States— Economic and environmental geology and prospects for future supply: U.S. Geological Survey Professional Paper 1802 p. O1–O31, <https://doi.org/10.3133/pp1802O>.

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