Testimony before the U.S. House of Representatives Subcommittee on Energy and Mineral Resources

"National Strategic and Critical Minerals Policy Act" and "Resource Assessment of Rare Earths Act of 2011"

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I. Introduction: America's Strategic Mineral Challenge

Chairman Lamborn, Ranking Member Holt, and members of the House Subcommittee on Energy and Mineral Resources, on behalf of Governor Sean Parnell, the State of Alaska welcomes this opportunity to testify about issues of such importance to Alaska and our country. We are eager to share with the U.S. Congress and the Obama Administration that Alaska has the potential to deliver domestic sources of strategic minerals to the nation. More specifically, we want to demonstrate to this committee and the rest of your colleagues in Congress the vital role Alaska can play in enhancing America's long-term security, expanding American employment, and growing the economy by delivering domestically produced and processed strategic minerals to the U.S. marketplace.

Today's testimony includes a pamphlet from the State of Alaska on an overview on rare earth elements and Alaska's significant potential regarding these and other strategic minerals.

Biographical Information

Before getting into substantive matters, I would like to briefly mention my professional background as it pertains to this testimony. I have been serving as commissioner of the Alaska Department of Natural Resources (DNR), a state agency of over 1,100 personnel, since December 2010. Under the Alaska Constitution, my primary responsibility as the DNR commissioner is to maximize the development of the state's resources in a manner that furthers the public interest. DNR manages one of the largest portfolios of oil, gas, minerals, renewable, land, and water resources in the world, including approximately 100 million acres of uplands, 60 million acres of tidelands, shore lands, and submerged lands, and 40,000 miles of coastline.

Prior to my appointment as DNR commissioner, I served as the Alaska Attorney General and as the U.S. Assistant Secretary of State for Economic, Energy, and Business Affairs under Secretary of State Condoleezza Rice. I am also a United States Marine, having served on active duty and in the reserves as an infantry officer since 1993.

II. Alaska is a Storehouse of America's Strategic Mineral Wealth

Alaska also has much to offer the nation in the effort to secure a stable domestic supply of minerals. In 2010, the value of Alaska's total mineral ore exports was \$1.3 billion, with exports to China, Japan, Canada, Korea, and Spain. Over \$200 million was spent by companies exploring in Alaska. This production is the tip of the iceberg; estimates of Alaska's mineral wealth potential are staggering:

- Coal: 17% of the world's coal; 2nd most in the world
- Copper: 6% of the world's copper; 3rd most in the world
- Lead: 2% of the world's lead; 6th most in the world
- Gold: 3% of the world's gold; 7th most in the world
- Zinc: 3% of the world's zinc; 8th most in the world
- Silver: 2% of the world's silver; 8th most in the world
- Rare earth elements: over 150 occurrences

Despite this enormous resource potential, Alaska is the most under-explored region for mineral deposits in North America, and is considered highly prospective with regard to strategic and critical minerals, including Rare Earth Elements (REEs) needed for domestic use.

III. Alaska is Well Positioned to Meet the Nation's Strategic Mineral Challenges

Strategic minerals, such as Rare Earth Elements, are becoming increasingly critical to our nation's economic well-being and security. China possesses an estimated 48% of the world's proven resources of REEs and is the dominant global supplier with nearly 97% of the world's production. Recent curtailment of REE exports from China and reliance on the Chinese industry for processing and manufacturing critical REE-reliant products has heightened awareness of the fragility of the supply-demand chain for REEs worldwide. Given China's virtual control of the market, it is clearly in our nation's best interest to establish a stable domestic supply of REEs.

Alaska can become a new, stable source of REEs for the nation. Alaska is by far the most under-explored U.S. state for mineral deposits and is considered highly prospective with regard to strategic and critical minerals needed for domestic use. Our vast land base is thought to contain at least 70 known areas with documented potential to host REE deposits and over 40 million acres of high mineral potential lands.

Alaska contains one of the most significant REE prospects in the U.S.: the Bokan Mountain/Dotson Ridge property. The property is currently ranked 15th in North America for total tonnage of contained rare earth metal oxides. But unlike other U.S. deposits, Bokan Mountain is enriched in yttrium, dysprosium, and critical Heavy REEs, which are essential for

the production of permanent magnets in some of our country's most important industries and products.

IV. The State of Alaska is Taking a Leadership Role in Facilitating Domestic Production of Strategic Minerals

In Alaska Governor Sean Parnell's State of the State Address in January 2011, he stated:

If we want our economy to become even more dynamic, we must also look to our untapped resources. [R]are earth minerals are of increasing importance in the world economy. These rare earth elements are used in almost every piece of electronic equipment you can think of; flat screen TVs, iPods, cell phones, aircraft radar systems, and much, much more. Today, our Pacific Rim neighbor, China, controls 97 percent of the world market for these rare earth elements. Recently, China imposed trade quotas and increased tariffs on these precious commodities. And, China announced it is substantially reducing access to these rare earth elements. These policies will cost Americans more of our hard-earned money and jeopardize national security. We cannot afford to rely on foreign sources to meet our nation's demand. And you know what; there may be no reason to. Alaska is a storehouse of rare earth minerals. Let's explore them. That's why this year we should work together to fund a strategic assessment of these minerals to determine, once again, how Alaska can help meet America's needs.

As the Governor's remarks indicate, the State of Alaska is focused on advancing Alaska's capacity to develop our strategic minerals for the nation's benefit. We are undertaking the following interrelated actions:

First, the state is undertaking a statewide assessment of REEs and other strategic minerals potential to better understand the extent of REE resources in Alaska. The state will gather data and improve industry access to these data to encourage and facilitate private-sector investment in Alaska's REE exploration and development. The Alaska state legislature recently appropriated, pursuant to Governor Parnell's request, \$500,000 to begin a statewide survey of state, federal, and native lands. We have already begun Phase I of this strategic minerals assessment.

Second, the state is providing support for the development of known or highly prospective REE and other strategic mineral occurrences throughout Alaska by exploring potential infrastructure improvements that could spur development, such as roads, port facilities, and power sources. The state legislature recently appropriated approximately \$75 million in bonding authority for infrastructure projects that will advance mining development and roughly \$1.5 million for studies to construct a road to the highly prospective Ambler mining district.

State economic development agencies also are actively engaged with the private sector on developing long-term financing for important resource-related infrastructure projects.

Third, the state is improving the structure and efficiency of its permitting process in order to expedite mineral development, including development of REEs and other strategic minerals. The state has gone to great lengths to improve its permitting process for mineral development. The state's large project permitting team is viewed as a model for signal point of contact coordination for efficient permitting. Nevertheless, there are still many permitting challenges, especially with the interplay between state, federal, and local regulatory processes. The state is therefore taking an aggressive approach to working with all levels of government to further refine and streamline permitting. The Governor's budget request of more than \$4 million for permitting reform was recently approved by the state legislature.

Fourth, the state is deepening its partnership and cooperation with stakeholders, including the federal government, local governments, Native corporations, and other potential new entrants to encourage domestic exploration, development, and processing of REEs and other strategic minerals. Improving these relationships is imperative for the country, not just Alaska. In Alaska, REEs are likely to be found on state, federal, and private (Native) lands, thus establishing a strong partnership with these entities will be critical to the initiative's success. The state is planning with the University of Alaska an important conference that will bring together all stakeholders to discuss REEs and strategic minerals.

Finally, the state needs to attract new investment and needs new markets for its abundant mineral resources. To achieve this goal, the state is promoting its mineral resource wealth to the rest of the country and overseas markets by discussing, for example, our resource base, our favorable fiscal structure, our robust environmental protections, and how we partner with industry to assist in the exploration and development of strategic mineral resources.

V. Alaska Supports Federal Efforts to Enhance Domestic Development of Strategic Minerals

The federal government will play a critical role in the development and processing of strategic minerals in Alaska and other states. The State of Alaska has been seeking a close working relationship with the federal government on these issues. In particular, Governor Parnell has recently sent letters to President Obama and Secretary Chu to strengthen the state's partnership with the federal government to facilitate the development of REEs and strategic materials in Alaska. In his letters, the Governor made the following requests:

- that the Administration direct the United States Geological Survey partner with the state to conduct an inventory of federal lands in Alaska
- that the Administration improve federal permitting by having high ranking mangers from federal agencies with decision making authority coordinate early and often with each other, permit applicants, and state agencies

- that the Administration use the University of Alaska's Arctic Region Supercomputing Center for REE research and development
- that Congress review the merits of amending existing federal statutes to allow the Department of Energy to provide loan guarantees, grants, and tax credits for the general mining and processing of REEs.

Alaska therefore supports federal legislation that will increase domestic production and processing of strategic minerals. The State of Alaska appreciates the opportunity to provide comment on the Critical Minerals Policy Act of 2011 and the Rare Earths Act of 2011 and endorses the underlying principles of these Acts. The state supports these bills, and Senator Murkowski's Senate Bill 1113, which seek to promote a stable supply of minerals to maintain our nation's economic well-being, security, and manufacturing, industrial, and technological capabilities.

Increase Federal Mineral Assessments

The state supports the Critical Minerals Policy Act of 2011 and the Rare Earths Act of 2011 requirement that the Department of the Interior conduct a comprehensive assessment of the nation's strategic minerals. Federal assessment of mineral commodities on federally managed land has been significantly reduced to date and no complete resource assessment of federal lands in Alaska has been completed. For example, the BLM disbanded their solid minerals group in Alaska in 2007 despite the fact that Alaska has 40 million acres of high mineral potential state and private land.

Nonetheless, the State of Alaska lacks sufficient information to fully assess the mineral potential in most areas of Alaska, which is why the state is preparing a first-level study of our 70 known areas of REEs. The state has already spent over \$10 million on mineral assessment work on some of these lands, including 10.6 million acres of high resolution geophysics and 5.2 million acres of geologic mapping, and as noted above will be spending another \$500,000 on a new assessment of REEs. Any federal assistance to further this effort will advance the country's ability to develop a secure and domestic supply of strategic minerals.

Enhance Access to Federal Lands

Even preliminary assessments in Alaska indicate that many of Alaska's strategic mineral resources will be found on federal lands. Indeed, Bokan Mountain is one prospect on federal lands. Therefore, it is important to increase the availability of access to federal lands for mineral development when assessments of such lands indicate high prospectivity.

In addition, as a part of the assessment, the federal government should review why these lands were withdrawn and provide a determination of whether the withdrawal is still appropriate. This is particularly important in Alaska because approximately 165.4 million acres of the total 215 million federally owned acres in Alaska have been withdrawn from mineral entry (or 82%).

<u>Undertake Federal Permitting Reform</u>

The state also applauds the Critical Minerals Policy Act of 2011 call for the federal government to improve coordination efforts among federal agencies and to "minimize duplication, needless paperwork, and delays in the administration of Federal and State laws and regulations, and issuance of permits and authorizations necessary to explore, develop, and produce minerals and construct and operate mineral related facilities."

Changes to the permitting system are particularly needed because the U.S. has received low rankings for difficult permitting of mineral development. The federal mine permitting system in the United States ranks as least efficient or timely among 25 mining countries, requiring an average time frame of seven to ten years to deliver a permit. This compares to Australia where permits are often issued in one to two years. A particularly egregious example of federal permitting delays is the Kensington Gold Mine in Southeast Alaska, which took almost 20 years to permit. The State of Alaska successfully intervened in litigation to help secure the necessary permits for this mine. The Kensington Mine is now in operation, producing significant quantities of gold, and employing hundreds of Alaskans.

Alaska has gone to great lengths to make its permitting system one of the most robust and efficient in the nation, but we can only improve so much without similar improvements the federal side. We have initiated measures to reform and streamline our permitting process, and continue to seek improvements and efficiencies, and we are partnering with new entrants to encourage private sector exploration, including at the Bokan Mountain REE deposit.

For these reasons, the state encourages federal efforts at permitting reform because permitting uncertainty and delay are stifling development. The State of Alaska has developed a coordinated permitting system that has evolved and worked well over the last 20 years. Our system ensures that all state agencies are working well together throughout the lengthy and complex permitting processes for all large resource development projects in the state. The federal agencies have no analogous system. We therefore recommend that the federal agencies adopt a coordination model similar to Alaska's. A strong federal coordinator would not only ensure that the federal agencies are working well together during permitting, but would help establish an experienced permitting team within the federal agencies. Strong coordination would also help the federal agencies develop new procedures that could make permitting more efficient, such as better synchronization between the EIS process and ACOE 404 permitting.

Establish Incentives for Domestic Processing and Research

Even if the United States increases domestic production of strategic minerals and REEs, we still lack a sufficient industrial base for processing these minerals. For example, if U.S. REE production were to begin next year, the processing of these minerals would have to take place in China. Thus, it is critical to develop domestic processing capability in conjunction with the production of strategic minerals and REEs.

Domestic processing capabilities will go hand-in-hand with a renewed effort expanding America's research capability. The Department of Energy's world-class laboratories could expand their focus on the development and domestic processing of these strategic minerals in partnership with universities and the private sector. Given how vulnerable we are to a shortage of these minerals and critical importance to our national security and economy, a renewed federal research effort on strategic minerals and REEs is appropriate.