

SENATE FINANCE COMMITTEE
March 13, 2024
1:37 p.m.

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CALL TO ORDER

Co-Chair Olson called the Senate Finance Committee meeting to order at 1:37 p.m.

MEMBERS PRESENT

Senator Donny Olson, Co-Chair
Senator Bert Stedman, Co-Chair
Senator Click Bishop
Senator Jesse Kiehl
Senator Kelly Merrick

MEMBERS ABSENT

Senator Lyman Hoffman, Co-Chair
Senator David Wilson

ALSO, PRESENT

Senator Kelly Merrick, Sponsor; Kerry Crocker, Staff,
Senator Kelly Merrick.

PRESENT VIA TELECONFERENCE

Lance Miller, Vice President of Natural Resources, NANA, Anchorage; Karen Matthias, Executive Director, Alaska Metal Mines, Anchorage; Melanie Werdon, Director, Division of Geological and Geophysical Survey, Department of Natural Resources, Fairbanks; Sandra Moller, Director, Division of Community and Regional Affairs, Department of Commerce, Community and Economic Development, Anchorage.

SUMMARY

SB 118 CRITICAL NATURAL RESOURCES; REPORTS

SB 118 was HEARD and HELD in committee for further consideration.

#sb118

SENATE BILL NO. 118

"An Act relating to critical and essential minerals and the global energy transition."

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SENATOR KELLY MERRICK, SPONSOR, introduced the legislation. She read from the Sponsor Statement (copy on file):

Critical and essential minerals comprise a wide range of elements, including lithium, copper, platinum, zinc, and more. These minerals are fundamental components of much of today's everyday equipment, like computers and household appliances. To keep our economy and our day-to-day lives moving forward, we need to ensure we have a plan for accessing these crucial resources as their demand increases. More and more renewable energy sources require components made of these materials as well, and that demand is likely to increase, possibly exponentially. Critical and essential minerals are key elements of emerging energy technologies, ranging from electric vehicles to solar panels.

The strategic plans that come out of SB 118 analyze the impacts of different regulatory frameworks on mineral development, and include considerations for economic viability, environmental sustainability, and efficient production processes. Alaska's commitment to advancing renewable energy is pivotal for a sustainable future and our commitment to production of critical minerals is pivotal for our own economy.

Senate Bill 118 is a forward-looking initiative that recognizes the critical role Alaska can play in advancing the global energy transition through industry and resources that have played such important roles in our state's past and present.

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KERRY CROCKER, STAFF, SENATOR KELLY MERRICK, discussed the Sectional Analysis (copy on file):

Section 1: Adds a new section to uncodified law to produce three reports:

1. The Office of the Governor shall generate a plan for the exploration, production, refining, and development of critical and essential minerals used in emerging technology.

2. The Department of Natural Resources shall compare Alaska's current and potential critical mineral production to national and international production, including regulation, permitting, and incentives. The report should identify strategies to increase exploration and development over the next three, five, and ten years.

3. The Department of Commerce, Community, and Economic Development shall identify the state's role in innovation, manufacturing, and transportation to support the global green energy transition.

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LANCE MILLER, VICE PRESIDENT OF NATURAL RESOURCES, NANA, ANCHORAGE (via teleconference), discussed the presentation, "Framing Alaska's Role in the Critical Minerals Space" (copy on file). He pointed to slide 2, "Demand for Metals: The global population will drive much of the demand":

After over 7,000 years metals are again (still) important!

And now the national aspiration for more renewables.

Mr. Miller suggested that the global population alone would drive much of the demand for metals. He pointed to the right side of the slide which showed a bar graph of various metals. He shared that oil was a relatively new extraction when compared to metals. He noted that in the last few 100 years the earth had added billions of people. He pointed out that Millennials have outnumbered Baby Boomers; Generation Alpha has outnumbered Millennials. He spoke of the increase of resource use as work continued to move populations out of poverty.

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Mr. Miller displayed slide 3, "Mining Activity in Alaska." The slide contained a map of the state with indicators of the various mining activities in Alaska. He stated that if The United States were to use the same density of Metal mines as British Columbia, Alaska would have 18 metal mines. He stressed that Alaska has a high potential for geological prospectivity.

Mr. Miller highlighted slide 4, "How long it takes...18-20 years to build a mine and... -for every 1000-3000 prospects, less than 2 percent go to prefeasibility." He noted that it can take decades to build a mine. He thought that the graph highlighted the technical aspects from prefeasibility to fruition of a mine.

Mr. Miller discussed slide 5, "Now there are more cell phones than people in the world (Consumer driven)." The slide showed a model of one of the first cell phone designs and a to-date Apple cell phone with a periodic table under each phone indicating the metals used in each. He noted that the smartphones of today use twice the metals as the older version. He contended that as technology advanced the demand for metals will increase.

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Mr. Miller pointed to slide 6, "Critical Minerals and Energy Transition (Consumer uptake is slow)." The slide illustrated the number of metals necessary in electric cars versus conventional cars. He said that the projected amount of copper needed in the next 25 years has been mined in the history of copper mining.

[1:47:03 PM](#)

Mr. Miller addressed slide 7, "Red Dog: A Critical Minerals Mine (Zn-Pb-Ag-Ge)":

"With zinc added to the list of minerals and metals critical to the U.S., world-class mine in Northwest Alaska is now top dog."

-North of 60 Mining News -March 4, 2022

He noted that the metals mined at the Red Dog mine included zinc, lead, silver, and germanium. He shared that the

global demand for germanium consumption was 30 tons, which made it a strategic mineral.

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Mr. Miller pointed to slide 8, "Many CM and REE's are Byproducts of Major Metal Production -they are not economic to mine in their own right."

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Mr. Miller discussed slide 9, "The BRI and China's International Trade." The slide showed a map of China's major BRI overland and maritime corridors. China's. The slide stated that 60 percent of critical mineral processing is in China.

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Mr. Miller highlighted slide 10, "Considerations Moving Ahead":

Domestic metal production, processing and manufacturing is not ready to accommodate projected demand (project pipeline is small and lead times long due to metals cycles, permitting, logistics, financing, workforce, social pressures) ...

Alaska has mineral resource potential yet it needs more focused exploration and research to define deposits. A second step is to define the processing opportunity/capability.

New federal policies/financing/subsidies are required to meet the audacious metal demand goals (if the US wants a secure domestic supply chain).

Alaska needs a Critical Minerals Strategy

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Mr. Miller looked at slide 11:

"mining is not everything, but without mining everything is nothing."

-Max Plank; Nobel prize winner in physics and known as the originator of quantum theory

Mr. Miller thanked the committee for their time.

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Co-Chair Olson recalled that there was a rare earth metals deposit in Southeast Alaska and wondered whether it was on the map on slide 3.

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Mr. Miller replied that the deposit in Bokan Mountain was not on the map. He said that mines on the map were either being produced or had completed a prefeasibility study.

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Co-Chair Olson asked whether the mountain contained a significant deposit.

[1:52:07 PM](#)

Mr. Miller responded that he could not speak to the market about the elements in the deposit.

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KAREN MATTHIAS, EXECUTIVE DIRECTOR, ALASKA METAL MINES, ANCHORAGE (via teleconference), spoke in support of the legislation.

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Co-Chair Olson noted that there were two fiscal notes.

[1:57:37 PM](#)

MELANIE WERDON, DIRECTOR, DIVISION OF GEOLOGICAL AND GEOPHYSICAL SURVEY, DEPARTMENT OF NATURAL RESOURCES, FAIRBANKS (via teleconference), explained the fiscal note from the Department of Natural Resources (DNR).

[1:58:33 PM](#)

SANDRA MOLLER, DIRECTOR, DIVISION OF COMMUNITY AND REGIONAL AFFAIRS, DEPARTMENT OF COMMERCE, COMMUNITY AND ECONOMIC DEVELOPMENT, ANCHORAGE (via teleconference), explained the

fiscal note from the Department of Commerce, Community and Economic Development (DCCED).

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Co-Chair Olson OPENED and CLOSED public testimony.

[2:00:04 PM](#)

Senator Bishop cited the current report from the Alaska Minerals Commission and stressed the need for a comprehensive mineral development plan.

SB 118 was HEARD and HELD in committee for further consideration.

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ADJOURNMENT

[2:01:59 PM](#)

The meeting was adjourned at 2:01 p.m.