NORTH OF 60 MINING news

page 7 Collier says permitting process is best place to evaluate Pebble

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NEWS NUGGETS

Compiled by Shane Lasley

UCORE RARE METALS INC.

Rare earth element salts derived from a solution sourced from Ucore Rare Metals' Bokan Mountain project in Southeast Alaska.

Ucore hails critical minerals EO

Ucore Rare Metals Inc. Dec. 22 said President Donald Trump's executive order to ensure reliable supplies of critical minerals is a fundamental policy shift that is important to the company and its Bokan Mountain rare earth elements project in Southeast Alaska.

The executive order signed by Trump on Dec. 20 instructs federal agencies to identify and publish a list of critical minerals, and develop a strategy to reduce the United States' reliance on other countries to supply them. The order acknowledges that continued reliance on foreign nations such as China for a critical supply of minerals is dangerous and jeopardizes the United States' technological superiority and military readiness.

"This EO represents a turning point in US critical mineral policy, and a sea change in thinking from the past 30 years," said Ucore President and CEO Jim McKenzie. "It portends the dropping of unnecessary and duplicative regulatory barriers, the opening of capital markets to mining investment, and the US government finally embracing the link between critical materials and national security."

The U.S. Geological Survey Dec. 19 published a report that identifies 23 critical minerals. Rare earth elements are included on this list of minerals considered essential to the economic and national security of the United States.

While their high-tech applications make them vital to the wellbeing of the United States, the fact that more than 90 percent of the nation's rare earths come from China elevates their status to critical.

Ucore's Bokan Mountain project at the southern tip of Prince of Wales Island in Southeast Alaska has been identified as a potential domestic source of rare earths.

A preliminary economic assessment completed for Bokan envisions a 1,500-metric-ton-per-day mining operation that would churn out 2,250 metric tons of rare earth oxides annually during the first five years of full production. This yearly supply included some of the more critical REEs such as 95 metric tons of dysprosium oxide, 14 metric tons of terbium oxide and 515 metric tons of yttrium oxide.

With the technical expertise of Utah-based IBC Advanced Technologies Inc., Ucore is also pioneering the use of molecular recognition technology to separate the 16 individual REEs, elements usually found together but are notoriously hard to separate.

SuperLig-One, a pilot plant using this technology, a successfully separated rare earths from a solution derived from Bokan Mountain and is being applied to non-conventional sources

see **NEWS NUGGETS** *page 7*

PUBLIC POLICY

Critical minerals order

Trump executive order calls for an American critical minerals strategy

By SHANE LASLEY
Mining News

Following a U.S. Geological Survey report that identifies 23 minerals critical to the economic wellbeing and security of the United States, President Donald Trump issued an executive order calling on federal agencies to devise a strategy to ensure America has reliable supply of these critical minerals.

"It shall be the policy of the federal government to reduce the nation's vulnerability to disruptions in the supply of critical minerals, which constitutes a strategic vulnerability for the security and prosperity of the United States," reads the executive order signed by Trump on Dec. 20.

DONALD TRUMP

Interior Secretary Ryan Zinke welcomed the focus on domestically sourcing critical minerals and the added tasks the executive order puts on Interior agencies, such as the USGS.

ALAN BAILEY

RYAN ZINKE

"The nation was largely built on the products produced from its mineral deposits," he said. "The future will also be built on a foundation of minerals, many of which will continue to be discovered and produced from across the country."

Critical minerals defined

The terms critical minerals and strategic minerals were first used in the United States during World War I. Over the ensuing century, however, the definitions of these overlapping terms have been somewhat subjective and has been interpreted differently by various agencies and individuals depending on their individual priorities.

USGS now considers strategic minerals a subset of critical minerals and has established criteria to determine which minerals should be considered critical.

In an 862-page report, "Critical Mineral Resources of the United States – Economic and Environmental Geology and Prospects for Future Supply", the federal geological department defines critical minerals as non-fuel minerals or mineral materials essential to the economic and national security of the United States; vulnerable to supply chain disruptions; and serve an essential function in the manufacturing of a product, the absence of which would have significant consequences for the U.S. economy or security.

With this definition, the USGS has identified 23 critical minerals – antimony, barite, beryllium, cobalt, fluorite or fluorspar, gallium, germanium, graphite, hafnium, indium, lithium, manganese, niobium, platinum group elements, rare earth elements, rhenium, selenium, tantalum, tellurium, tin, titanium, vanadium, and zirconium.

UCORE RARE METALS INC.

Thick rare earth element bearing veins at Ucore Rare Metals' Bokan Mountain project in Southeast Alaska.

Alaska's critical mineral potential

The Trump Administration's focus on securing domestic sources of critical minerals could help re-invigorate mineral exploration and mine development in Alaska.

At least 15 of the 23 critical minerals identified by the U.S. Geological Survey – antimony, barite, beryllium, cobalt, fluorspar, gallium, germanium, graphite, indium, platinum group elements, rare earth elements, rhenium, tantalum, tellurium, tin and vanadium – are found across the Far North state.

Working alongside the Alaska Division of Geological & Geophysical Surveys, USGS

see **MINERAL POTENTIAL** *page 6*

"For a number of these commodities – for example, graphite, manganese, niobium, and tantalum – the United States is currently wholly dependent on imports to meet its needs," according to the USGS report.

Critical minerals strategy ordered

Trump's critical minerals executive order instructs Secretary Zinke, in coordination with Secretary of Defense James Mattis, to identify and publish a list of critical minerals, and develop a strategy to reduce the United States' import reliance for these increasingly important ingredients to modern personal and military devices.

Within six months of establishing the critical minerals lists Trump wants a report that includes:

- a strategy to reduce the Nation's reliance on critical minerals;
- an assessment of progress toward developing critical minerals recycling and reprocessing technologies, and technological alternatives to critical minerals;
- options for accessing and developing critical

see **CRITICAL MINERALS** *page 7*