

Bokan Mountain

Developer: Ucore Rare Metals Inc.

Location: Prince of Wales Island, Alaska

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Background

Located in the southeastern panhandle of Alaska on the Prince of Wales Island, the Canadian mining company Ucore Rare Metals has begun rare earth element mining operations at Bokan Mountain. This project will extract 5.3 million tons of rare earth elements, namely dysprosium, terbium and yttrium from the largest rare earth deposit in the U.S. over its 11 - 15 year lifespan. Additionally, the project area ranges across 9,500 acres of federal mining claims in the Tongass National Forest, along with 640 acres of state mining claims ([Ucore, 2013](#)).



The economy in this area of Alaska has been historically supported by the timber and fishery industries, however both have seen little to no growth in recent years. The nearest town to the Bokan Mountain mining project is a small town of about 400, named Hydaburg, that is about 33 miles to the northwest. Unemployment levels in this area of Alaska as of 2016 hovered around 16 percent during the off-season winter months and only dropped down to 10- 12 percent during the fishing season ([DLWD, 2017](#)).

Throughout the 1950s and 1970s, Bokan Mountain was the location of the Ross- Adams Uranium Mine, where approximately 94,500 tons of uranium ore were removed. As a result of these operations, contaminated soils and waste rock remain at the location, which is now designated as a Superfund site under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) ([Forest Service](#)).

Policy Context

Rare earth elements have become of particular importance and interest for a variety of reasons ranging from local economic needs to the dynamics of international politics. Rare earths, which have become increasingly important on the global level for the advancement of military and green technologies, are almost exclusively mined in China. Currently, China produces 97% of the world's supply of the main elements that will be mined at Bokan Mountain. In recent years, China has used its export control over these elements as political leverage against other countries.

The U.S. has a vested interest in being able to produce its own rare earth metals. On the national scale, the U.S. Department of Energy is concerned that both short and long term supply of these elements are at "critical risk" of shortage. In May 2017, Congress passed the Consolidated Appropriations Act which provided 20 million dollars in support of Ucore Rare Metals, Inc. and its partners ([Ucore, 2017](#)).

On the state level, rare earths production and Ucore's Bokan Mountain project have received widespread support. Tax revenues from mining operations in the state support much of the state's activities, including payroll for state workers and educational funding. In 2014 former Gov. Sean Parnell signed legislation authorizing the Alaska

Industrial Development and Export Authority to finance up to \$145 million for Bokan's construction, nearly three-quarters of the project's \$200 million price tag ([Brehmer, 2016](#)).

Public Response and EIS Process

As mentioned before, this region of Alaska suffers from economic stagnation due to drop-offs in the local timber and fishing economies. Ucore's preliminary economic assessment suggests the mine would employ about 300 people during the two year construction period and would create almost 200 jobs during its ten years of operation.



Due to this increase in available jobs, the mine is generally well received by Alaskans in the area. Many were excited by the prospect of economic revitalization. The proposed plan of action was submitted by Ucore on the Tongass National Forest Schedule of Proposed Actions in 2012. The next year yielded few comments from the public. Many native tribes, such as the Haida Indian Tribe, the Ketchikan Indian Community, and the Craig Tribal Association, were consulted during the environmental assessment conducted by the Forest Service. Many of them were wary of the possible impacts that the mining might have on the surrounding, especially given the fact that Bokan Mountain is already a Superfund site from previous uranium mining. Indigenous groups also expressed concern that rare earth developments could trigger permitting streamlining for reasons of national security and weaken environmental regulation of the mine. Indigenous groups of the area rely on traditional subsistence practices, which they fear could be negatively impacted by contamination from the mine. ([PRI, 2013](#)). Moreover, there was concern from multiple parties that the jobs created by the Bokan

Mountain Project would go to non-locals and not actually help revitalize the economy of the area.

The Tongass Conservation Society based out of southeastern Alaska is concerned that Ucore is “downplaying the fact that Kendrick Creek is listed as high priority by the State of Alaska Contaminated Sites Program because of heavy metals and radioactive isotopes left by the Ross-Adams mine.” The group demands protection for nearby Kendrick Creek which is critical habitat for salmon populations that are harvested by locals for subsistence ([TCS](#)).

Despite these concerns, a 2013 record of decision was released by the Forest Service for Ucore's Mining Plan of Operations that stated that the project would not have any adverse environmental impacts, provided that some modifications were put in place. Ucore was given permission to proceed ([Forest Service, 2013](#)).

In early 2018, Ucore announced plans to open a rare earth metals separation plant in nearby Ketchikan, Alaska by 2020. Although construction of the Bokan Mountain mine itself has not begun, the company eventually plans process the ores from the mine at the plant along with ores from all over the world. This recent development has received the support of Senator Lisa Murkowski who hosted and chaired a roundtable discussion for local stakeholders in late February to learn more about their perspectives ([Kauffman, 2018](#)).

Conclusion

Ucore's Bokan Mountain project could be beneficial to stakeholders from local, state, and national levels. Despite considerable financial support from the state and the immense amount of profitable material to be extracted, development of the project appears to be stalled. Extreme caution should be exercised with advancements in the development of this mine, especially considering the already existing Superfund site and concerns of indigenous groups and their subsistence. Moreover, due to the present volatility of global REE markets, it is very well possible that the Bokan Mountain project will never be viable.

Works Cited

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Photo Sources

¹https://commons.wikimedia.org/wiki/File:Bokan_mountain_locator_USGS.JPG

²<https://crustal.usgs.gov/projects/AGREED/Bokan-Mountain.html>