

Mineral Security Projects: Rare Earth Mineral Security

FY2023 Request:

\$0

Reference No:

64391

AP/AL: Appropriation

Project Type: Education

Category: Education

Location: Statewide

House District: Statewide (HD 1-40)

Impact House District: Statewide (HD 1-40)

Contact: Michelle Rizk

Estimated Project Dates: 07/01/2021 - 06/30/2026

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Brief Summary and Statement of Need:

Funding for Phase 2 of the Alaska CORE-CM project

Funding:	FY2022	FY2023	FY2024	FY2025	FY2026	FY2027	Total
1002 Fed Rcpts							\$0
1004 Gen Fund	\$250,000						\$250,000
Total:	\$250,000	\$0	\$0	\$0	\$0	\$0	\$250,000

State Match Required
 One-Time Project
 Phased - new
 Phased - underway
 Ongoing
 0% = Minimum State Match % Required
 Amendment
 Mental Health Bill

Operating & Maintenance Costs:

	<u>Amount</u>	<u>Staff</u>
Project Development:	0	0
Ongoing Operating:	0	0
One-Time Startup:	0	0
Totals:	0	0

Prior Funding History / Additional Information:

Project Description/Justification:

* Sec. XX. SUPPLEMENTAL UNIVERSITY OF ALASKA. (a) The amount of federal receipts available under P.L. 117-58 (Infrastructure Investment and Jobs Act), estimated to be \$7,500,000, is appropriated to the University of Alaska in the fiscal year ending June 30, 2022, for mineral security projects, including rare earth mineral security

(b) The amount of general funds required to plan for, coordinate, and match federal receipts available under P.L. 117-58 (Infrastructure Investment and Jobs Act) in (a) of this section, not to exceed \$2,000,000, is appropriated to the University of Alaska in the fiscal year ending June 30, 2022.

University of Alaska Fairbanks - Institute of Northern Engineering (UAF-INE) is currently leading a U.S. Dept of Energy (DOE) funded project to establish a pathway whereby Alaska's Carbon Ore, Rare Earth and Critical Minerals (CORE-CM) can provide an economically competitive supply of Rare Earth Elements & Critical Minerals (REE-CM) to help reduce the nation's reliance on non-allied, imported sources.

The Alaska CORE-CM project is funded under a cooperative agreement with DOE's National Energy Technology Lab (NETL), led by UAF and one of 13 national centers tasked with addressing the critical

shortage of domestically supplied REE-CM. Project partners include DNR Division of Geological and Geophysical Surveys, Green Leaf Carbon Technologies, JWP Consulting, LLC; Technology Holding, LLC; ESP Research, Inc.; Ahtna, Inc.; Ucore Rare Metal; CVMR Inc.; Graphite One Inc.; and Usibelli Coal Mine.

Phase 1 of this multi-phased initiative was funded with a \$1.5 mill DOE grant.

Project deliverables include Basinal Assessments to compile, catalogue, and analyze Alaska's carbon-ore resources and associated REE-CM concentrations to include coal and large-flake graphite deposits; development of a prioritization matrix that incorporates the geological, technical, and financial factors impacting economic production of REE-CM's from Alaska; assessment of existing and future regional waste streams from carbon ore and hard-rock mining operations that could be reused as inputs for production of REE-CM, or high-value, nonfuel carbon-based products or other by-products as consumables, feedstock, and fuels; developing and validating tools and technologies needed to spur CORE-CM development; accelerate research that will enable Alaska Basin-specific commercial deployment of advanced processing; advance new and innovative technology and production of high-value, non-fuel products.

Section 41003 of IIJA provides an additional \$800 million in authority to DOE to continue to advance Rare Earth Element mineral security projects.

Phase 2 of the CORE-CM project is expected to be funded in 2023 with \$7.5 million from DOE-NETL and will require a \$2 million non-federal match.