ALASKA

NORTH TO OPPORTUNITY

REPORT OF THE ALASKA MINERALS COMMISSION

JANUARY 2023

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Alaska Minerals Commission

The 11-member Alaska Minerals Commission (AMC) serves in an advisory capacity to the Governor and the Alaska State Legislature. Five members are appointed by the Governor (one of whom must reside in a rural community), three members are appointed by the President of the Senate, and three members are appointed by the Speaker of the House of Representatives. The State of Alaska Division of Community and Regional Affairs supports the AMC by facilitating their annual meetings and assisting with the annual report.

The Commission's role is to recommend strategies to mitigate constraints on mineral development in Alaska. Created by the Legislature in 1986, the AMC's authorization was extended through 2024 by the Legislature in 2013 via House Bill 99. For over 30 years, the AMC has worked with the State of Alaska and Alaska State Legislature to successfully implement key recommendations that support a strong and sustainable Alaska minerals industry. This report builds upon past work with the intent to identify state and federal issues that can block responsible development.

This publication was released by the Department of Commerce, Community, and Economic Development (DCCED) in January 2023.
This report is required by AS 44.33.431 (d) and does not constitute an official position or opinion by DCCED.

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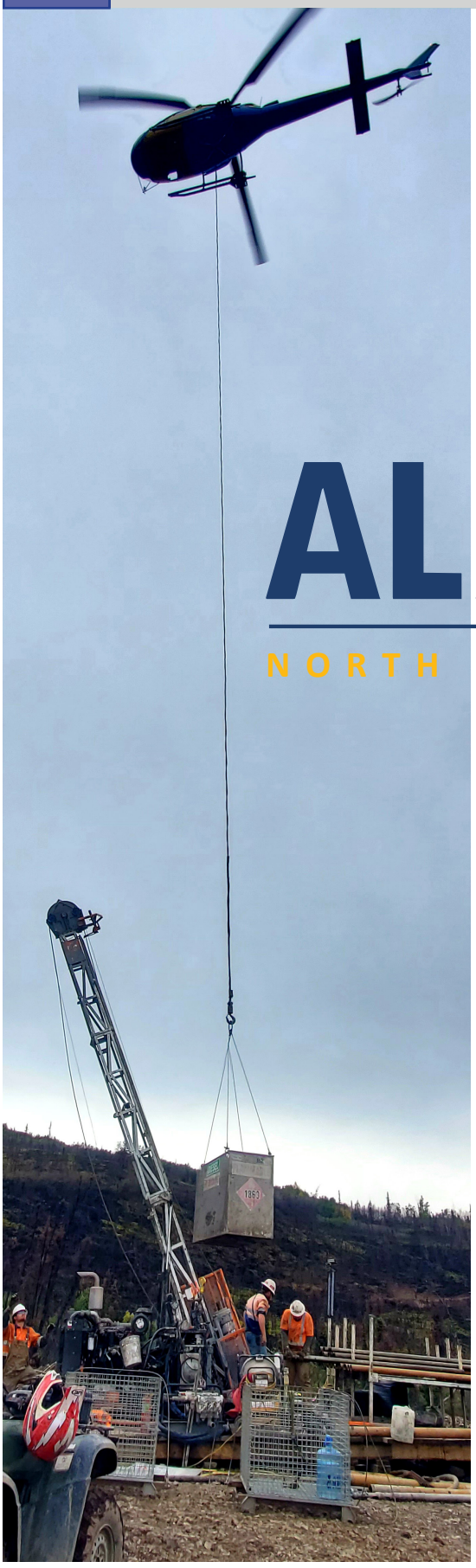

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INTRODUCTION

Mining is a cornerstone of our society and economy, supporting all aspects of our everyday life. The minerals industry is the source of raw materials used in the production of critical components for technology we use daily, from cell phones and computers to clean technologies like electric vehicles and solar panels. It provides the minerals and metals used in construction and electricity generation, and every industry that drives our state and local economies. In Alaska, the mining industry has demonstrated its ability to help diversify the economy and provide wide-ranging employment opportunities in both rural and urban areas, supporting rural infrastructure and lowering the cost of living, all while operating at the highest environmental standards.

Mining is a fundamental component of the statewide five-year Comprehensive Economic Development Strategy (CEDS), which was recently renewed in 2022. Mining helps to create a diversified economy and a more stable fiscal environment in which all businesses can thrive. Increased minerals development and exploration in Alaska can help increase fiscal stability and economic development, helping to achieve Governor Dunleavy's priorities to grow the state's economy and promote the "Alaska is Open for Business" initiative.

Alaska has five operating large hard rock mines, one large coal mine, and approximately 150 small placer mines[1]. Alaska's major mineral deposits currently in production include the Red Dog Mine in the Northwest Arctic region; the Greens Creek and Kensington Mines in the Southeast region; and the Pogo and Fort Knox Mines in the Interior region. The Usibelli Coal Mine is the state's only active coal mine, providing coal for Interior Alaska power plants.

According to the McKinley Research Group[2], together these operations provided 5,400 direct jobs in 2021, employing residents from throughout Alaska. In 2021, mining provided a total of 10,800 direct,indirect and induced jobs, with a total direct and indirect payroll of $985 million. Mining provides some of the highest paying jobs in the state of Alaska, with an annual average wage of $117,888 in 2020. In addition in 2021, the State of Alaska received $83 million in revenues from the mining industry from license fees, rents, royalties, material sales, and other fees. Local governments received an estimated $44 million from taxes, payment in-lieu of taxes (PILT), payments in-lieu of development (PILD), and rents or production revenue from material sales, and about $164 million in payments to Alaska Native Corporations.

The mining industry pays an Alaska corporate income tax of up to 9.4 percent of income, which is the same for all corporations in the State of Alaska. The mining industry also pays up to 7 percent of net profits as an additional mining license tax, which applies to all mining operations including royalty owners (regardless of size), land status, mineral ownership, or location. Mining operations on State of Alaska land pay an additional 3 percent net profit royalty. Large mining operations are also significant taxpayers in their communities, paying property taxes in the Fairbanks and Juneau boroughs and a payment in lieu of taxes in the Northwest Arctic Borough.

The AMC commends State of Alaska leadership on actions taken to improve the minerals exploration, development, and production climate in Alaska. The AMC presents this 2023 report with six priorities and corresponding recommendations.

[1] Twelker, Evan, Werdon, M.B., and Athey, J.E., 2022, Alaska's Mineral Industry 2020: Alaska Division of Geological & Geophysical Surveys Special Report 76, 75 p. https://doi.org/10.14509/30848
[2] Alaska Miners Association, Council of Alaska Producers. The Economic Benefits of Alaska's Mineral Industry. McKinley Research Group, May 2022.

Top Priority

Develop a 'Comprehensive Mineral Development Plan' for Alaska

Over the last several years we have seen numerous efforts from Alaska's Government leadership and agencies to promote the development of mineral resources in the state. The supply chain issues that resulted from the Covid-19 pandemic, increased competition with China, and Russia's war with the Ukraine have reminded us of the need for minerals sourced in the United States to support the American economy and National Security.

At the Federal level we have seen supportive policies, legislation and increased funding, as well as more action at the corporate level to secure the supply of raw materials necessary for the products we consume every day.

Alaska is uniquely positioned to play a leadership role in meeting the national mineral supply demand. Forty-nine of the fifty minerals identified as critical to the US economy and National Security in 2022 are found in Alaska. The state boasts a supportive natural resource development policy, and a proven mining industry. In conclusion, there now exists a rare alignment of mineral wealth in Alaska, demand, Federal policy, state support, and an established industry, which presents an opportunity for mining industry and economic growth.

However, mining in Alaska is not without challenges for potential investors: The remoteness and lack of infrastructure are real obstacles to new development; antidevelopment sentiment often sourced from outside the state negatively affects the permitting process; and The state's workforce often lack the necessary skills. To overcome these challenges and generate new mines, the State must develop a Comprehensive Mineral Development plan addressing the following:

Infrastructure

A key factor preventing new mines coming online is the need for infrastructure including access and power. Alaska has the lowest infrastructure network in the nation. Mineral development companies must incorporate the cost to design, construct, and maintain infrastructure to make their projects viable. For this reason, most mineral projects in Alaska are also infrastructure projects.

The state must study and evaluate the mineral potential of the various mining districts, and either proactively, or in partnership with project proponents, create access and power solutions to facilitate development. Furthermore, the decision-making process regarding retirement, refurbishment, or management of existing infrastructure must incorporate the capacity for growth and support of new mineral projects. Infrastructure development can be self-sustaining and enables not only mineral resource projects but economic growth across all sectors for remote communities and the state at large.

State Priorities:

1) Predictability of the State of Alaska Permitting Timeframes
2) Reallocate portions of the State of Alaska mining license tax to communities, while precluding targeted local severance taxes
3) Support the Division of Geological & Geophysical Surveys
4) Support Education and Outreach for Mineral Development
5) Modernize the online mineral claim staking and claim management system

Federal Priorities:

1) Industry Must Have Clear Federal Permitting and Regulatory Requirements

Top Priority (cont.)

Workforce Development

New mines mean additional labor demand, including skilled labor such as engineers, technicians, operators, maintenance personnel, and a host of other expertise. These are high wage and life altering career opportunities for those in the industry. Alaska's unique operating conditions necessitates a home-grown workforce that understands those conditions and thrives in them. Any initiative to expand minerals development must also address the associated labor needs. Home-growing the workforce to meet this demand will require investment across all sectors of workforce development, from Management and Engineering programs in the University of Alaska system to vocational and technical training facilities.

Dialogue

A successful plan to develop the state's mineral resources must consider the interest and benefits of all Alaskans. For that reason, a successful planning process needs to include the input of residents, community planners, landowners, and advocate groups.

Education

Mining development projects in Alaska are not strange to public opposition. Too often this the result of a lack of understanding of the industry and driven by fears inspired by antidevelopment advocate groups. The mining industry has been investing in education programs to help residents understand, why are minerals needed, where minerals originate, and how they are extracted safely and in an environmentally protective manner. However, the state must also support such educational trainings, so residents can understand the values of mining.

Continued State Support

The State has already demonstrated its support for mineral and natural resource development in a variety of ways. Declaring Alaska open for business, and ongoing support of State agencies such as DGGS, as well as the Unlocking Alaska initiative, have been central to the State being positioned as it is to lead the way on Critical Minerals development. There are numerous projects underway at DGGS and other state agencies to map and collect data on mineral resource deposits in support of development. It is important that this support continues if mineral development is to scale up.

One of the challenges in mineral development projects is permitting. The permitting process does and must continue to incorporate high standards for responsible development. However, its unpredictability injects uncertainty and risk into mineral projects that stagnates the development timeline and will be at odds with the stated goals of rapid critical minerals development. Much of this is due to factors out of state control; however it is important that at the state level agencies are staffed and organized to optimize the permitting process, and that the state pushes back if and when projects are held up at the federal level.

State Priorities

1. Predictability of the State of Alaska Permitting Timeframes

Processing of permit applications from DNR and the Alaska Department of Environmental Conservation (ADEC) are often delayed due to a shortage of personnel resources to handle the volume of applications. Mineral resource operators must have predictability in the timeframes associated with review, processing, and adjudication of permits to ensure uninterrupted work and encourage investment in the State of Alaska's mineral resources.

Further aggravation to this issue may result from the Biden Administration's increase in construction funding to Alaska over the next five years through infrastructure projects for roads, airports, ports, ferries, broadband, climate resiliency, green energy, and community improvement projects. These projects will require decisions and permits from State of Alaska regulatory agencies; the same agencies that are currently engaged in permitting mineral projects in Alaska.

Current Alaska demand has permitting agencies operating at capacity to issue decisions and permits.

The State of Alaska needs the capability to issue additional decisions and permits in a predictable manner for projects. This action will show investors that the State of Alaska's permitting system is robust and able to adapt to priorities and demand.

Recommendations:

- Support the development of tools to track the processing of permit applications with transparency for the application progress and accountability for the State of Alaska in meeting required timeframes.
- Support funding of additional State of Alaska personnel positions for timely processing of permit applications.
- Seek ways to minimize employee turnover in State of Alaska departments. The State must be able to retain and attract qualified, experienced personnel to the permitting and regulatory agencies.

2. Reallocate portions of the State of Alaska mining license tax to communities, while precluding targeted local severance taxes

The AMC believes that communities should benefit when natural resource exploration and development occurs nearby. Whether related to large scale long-term mining or short-term seasonal prospecting, the economic boost to local economies from mining and mineral development may generate increased demand in providing local government services. Communities could benefit from a reallocation of the State of Alaska Mining License Tax (AS 43.65).

Presently, there is no uniform mechanism to allocate a portion of the tax revenue back to communities associated with mineral development. Such a revenue-sharing model could provide needed assistance to communities[3].

Sharing portions of State of Alaska revenue from mineral resource development with local communities in a predictable fashion reduces the need for local governments to impose their own industry targeted taxes, such as severance taxes. The uncertainty of the timing, stability, and size of a local tax could discourage mineral development. Moreover, allowing local governments to impose potentially onerous severance taxes shifts control of development decisions away from the State of Alaska.

Recommendations:

- Allocate portions of the statewide mining license tax to communities located near mining operations in order to create a stable economic regime that can provide an attractive investment climate in Alaska.
- Revise the municipal tax code to preclude local municipal severance taxes on mineral resources. This revision would not prevent a local government's ability to utilize a broad-based tax[4], such as a property tax or sales tax.

[3] The fishing industry has an informal means to split taxes between the state and the local communities. This approach would adopt the concept but be more specific in the division of revenues.

[4] Both the Fairbanks North Star Borough and the City and Borough of Juneau benefit from broad-based taxes that include local mine operations.

3. Support the Division of Geological & Geophysical Surveys

The Alaska Division of Geologic and Geophysical Surveys (DGGS) within DNR plays an integral role in identifying Alaska mineral resources, mineral potential, and attracting investment to the State of Alaska. Their work includes collecting new geologic data, quickly publishing that data, and maintaining an extensive publicly available database. This database is commonly a first stop for explorers looking to invest exploration funding within the State of Alaska.

In November of 2021, the U.S. Geological Survey (USGS) released a draft list of 50 minerals which are deemed critical to the development of the country's economy[5]. The United States is dependent on unpredictable foreign producers such as China, Russia, and the Democratic Republic of the Congo for many of its critical mineral supplies, which results in an unacceptable risk to the national and economic security of the United States. Many of these minerals (especially zinc, graphite, and cobalt) are hosted within established mineral belts across Alaska. DGGS' publicly available data provides explorers an advantage when selecting areas to claim on State of Alaska land, and therefore makes that investment more attractive when compared to other states or countries that lack such information.

Much of Alaska's 663,000 square miles of land (more than a sixth of the total area of the United States) "has not been systematically studied or sampled for mineral resource potential"[6]. Now tasked by both Alaska's Legislature and the USGS, DGGS must be well supported in its further efforts to identify where critical minerals are to be found. Federal funding is vital and currently available, but State of Alaska matching funds are necessary to maximize federal support. The State of Alaska has previously supported these efforts through the Airborne Geophysical/Geological Mineral Inventory (AGGMI) program. The AMC recommends the State of Alaska continue to provide matching funds for grants and funding opportunities available through the federal government. The data produced by such efforts will have a long-term positive impact on attracting exploration dollars to State of Alaska land.

Another critical support for DGGS is the continuation and growth of the Geologic Materials Center (GMC). The GMC hosts the State of Alaska's archives for geologic samples collected by mineral, oil, and gas exploration companies, as well as state and federal agencies. Core repositories such as the GMC are commonplace in states that host significant mineral resources. Samples in the State of Alaska archives date back to the early 1900s and contain a wealth of information that can lead to additional discoveries based on information collected by modern analysis. The GMC archives contain over 18 million feet of core samples and cuttings from oil and gas exploration and 565,000 linear feet of drill core samples from mineral companies. They also contain 507,000 surface samples and over 35,000 thin sections[7].

Finally, DGGS' role in promoting the State of Alaska at international mining conferences – where local experts can showcase our mineral potential, investment climate, and interact with investors – needs ongoing support. Roughly 80 percent of the funding for mineral exploration in Alaska is from companies housed outside of Alaska, most recently from Canada and Australia. These outreach activities are how the State lets the world know that Alaska welcomes mineral and mining investment.

Recommendations:

- The Governor and Legislature should continue to support assessment of Alaska's critical minerals. Airborne geophysical surveys, geological mapping, and mineral inventories are activities that can be funded through annual capital appropriations to the operating budget. Investing in these state-funded programs will, in turn, ensure federal funds are maximized.
- Support for the GMC to host and maintain a core repository and ability to conduct analysis on samples should continue.
- Funding should continue to support attendance by DGGS and DNR at international and national mining conferences to promote Alaska's mining industry.

[5] USGS Seeks Public Comment on Draft List of 50 Minerals Deemed Critical to US National Security and the Economy, accessed November 2021, https://www.usgs.gov/news/national-news-release/usgs-seeks-public-comment-draft-list-50-minerals-deemed-critical-us-0

[6] U.S. Geological Services, 2017, Geospatial Analysis Identifies Critical Mineral-Resource Potential in Alaska Fact Sheet

[7] GMC Curator Kurt Johnson, personal communication, November 2021.

4. Support Education and Outreach for Mineral Development

The AMC recognizes the importance and value of educating both our youth and the public in regards to the necessity for resource extraction to support and expand both our way of life and our technological advancements. The need to illustrate and expand upon the many ways in which resource management done well can benefit all people needs to be clearly and thoroughly disseminated at all levels.

- Children in the schools understanding the part that resource extraction and management play in their future
- Instructors to understand the needs, impacts and methods to supply resources for every-day life in order to appropriately instruct those students
- General public knowledgeable about how they play a part in the rules and regulations they direct legislators to create
- Legislators and public officials informed about the absolute requirement to produce and manage resources, and how decisions they make can go counter to the constitution of the state, the needs of the people and the needs of the nation if not thought through the entire process for impacts and outcomes

In order to support and enhance the general understanding of resource extraction and management in Alaska, we must provide verbal, monetary, and directive guidance for how decisions are made, what rules are put in place, what impacts those decisions will have, and how far reaching if they are overly proscriptive. There are many challenges in safely and properly executing the extraction of resources from our state, but there's always a middle ground where compromise is possible to achieve all of our goals to the best, and most environmentally responsible means possible, as we continue to show that we are capable of achieving.

Recommendations:

- Work with and encourage collaborative engagements between industry and educators to provide first-hand knowledge and understanding of what is actually taking place at working operations
- Provide incentive encouragement to generate public-to-private engagement through informative surveys, public dissemination of information about the positive outcomes of the resources currently produced by the state. Information about what else could be produced to support so many of the things around us when responsibly produced in an environment, and regulatory system that balances the needs on both sides to allow resource production while protecting the environment, supporting and bolstering the neighboring and regional communities for better final outcomes

5. Modernize the online mineral claim staking and claim management system

Alaska's system for acquiring mineral rights is antiquated and is a disincentive for would-be explorers, developers, and miners. It is recommended that Alaska investigate moving to an online claim staking system using an interactive website. This website should allow for real-time viewing of mineral claim status and online submission of claim applications and maintenance. Many modern jurisdictions around the world have adopted such systems. The result has been increased exploration and development of mineral resources and efficiency and costs saving for government

In order to acquire mineral rights on state land in Alaska, an individual or company must place corner posts in the ground with appropriate markings that document the identity of the claimant and the date upon which the posts were placed. The post may be a squared-off tree, a four-foot-long 4 inch by 4 inch post, or as has become common practice, a four-foot-long steel "rebar" post with a 4 inch by 4 inch wooden block mounted at the top. If a large tract of claims is staked, many thousands of posts may be necessary. Often the posts are placed by dropping them from a helicopter or fixed wing aircraft. Once placed, the claimant has up to 45 days to record a Notice of Location with the appropriate Mining Recorder, at which time fees are paid. Claims are maintained by paying annual rental to the State of Alaska and by doing exploration, development, or mining on the claims. Under the Meridian-Township-Range- Section (MTRS) grid system, the claim posts are meant to be placed at the corner of each quarter section for 160 acre claims, or at the corners of each quarter-quarter section for 40 acres claims. Prior to staking, the claimant must review land status on the DNR website to determine if the land in question is (1) State of Alaska land open for mineral entry, and (2) not already been claimed by another party.

The DNR website is called AlaskaMapper. It is an interactive map that shows land status. Information on mining claims may be obtained by clicking on the plotted claim. Unfortunately, DNR is unable to keep the site up to date. This presents two problems: (1) claims may have been abandoned by an owner, but since AlaskaMapper is not up to date, the land still appears to be claimed; and (2) there is risk that claims have been staked by a competing party but not yet reflected on AlaskaMapper in which case a new claimant may waste time and money staking claims on land that has already been claimed by others. Diligent stakers also check the Mining Recorder's website to see if there has been recent staking activity. However, since there can be a 45-day window from staking date to recording date, there is still risk that money will be wasted staking claims that have already been staked by others.

The current AlaskaMapper creates a disincentive for claim staking and the exploration and development that follows. Many more claims would be staked if would-be developers could see accurate real-time land status through an interactive on-line system from anywhere in the world and could have the ability to stake claims using the same online system. Fees would be immediately collected by the State of Alaska, and subsequent claim rentals would be paid through the online system. Such a system would allow DNR staff to be more efficient. Additional mineral exploration, mineral discovery, mineral development, and mining would result from these changes. After the initial cost to change the system, DNR would likely save money on staff time, and the State of Alaska would realize significantly increased revenue from claim rentals and mining taxes.

Recommendations:

The state's Division of Mining, Land and Water (DMLW) has recently solicited a Request for Proposals for an independent consultant to review the systems and workflows and recommend efficiencies. The analysis is meant to evaluate all of DMLW workflows including claim management and permitting. The Commission recommends that the DMLW encourage the selected consultant to fully consider developing an online staking and tenure management system for State of Alaska mining claims. The analysis will have to consider the legal barriers which may exist to implementing the online system. Also, a Cost-Benefit analysis should be done. If findings are positive, the State of Alaska should institute an online claim staking system with real time up-to-date claim maps with real time up-to-date claim maps.

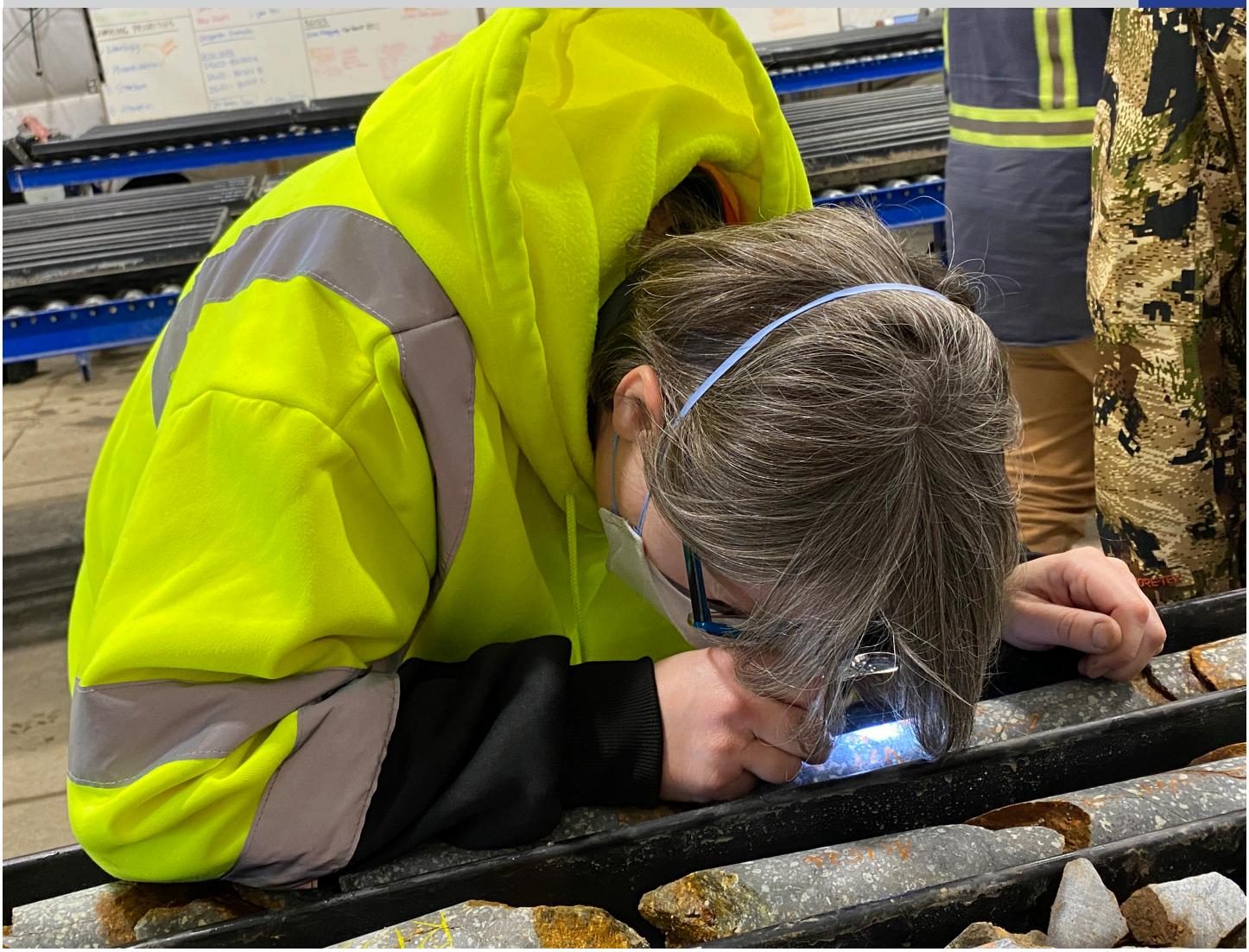
Federal Priorities

1. Industry Must Have Clear Federal Permitting and Regulatory Requirements

Since statehood, the federal government has failed to give Alaskans and the State of Alaska many of the rights and resources it was granted at statehood. The federal government has pursued a policy to hinder the access and rights of Alaskans to use and enjoy the resource benefits on private and State of Alaska lands. This overreach from the federal government restricts the State's uses of its resources and also inhibits Alaskans use and develop of the resources they are entitled to in the state.

Recommendations:

- The Legislature and Governor should continue to further fund and support both DNR and the Alaska Department of Law in legal challenges against the federal government to assert the State of Alaska's rights against the federal government.
- The Governor and Legislature should continue to support exemption of the Tongass National Forest from the Roadless Rule because the recent United States Department of Agriculture's (USDA) addition of 9.4 million acres of inventoried roadless areas to the 6.5 million acres of land already set aside by Congress in the Alaska National Interest Lands Conservation Act of 1980 (ANILCA) and the Tongass Timber Reform Act of 1990 (TTRA) makes access to critical minerals needed by the United States more difficult and expensive to access and is inconsistent with the "no more" clause of ANILCA.
- The Governor and Legislature need to ensure a durable and reasonable Waters of the United States Rule. The Environmental Protection Agency (EPA) needs to be reminded that the mining industry requires a stable and predictable regulatory climate to make long term capital investments.
- The Governor and Legislature need EPA and USACE to implement a reasonable, consistent, and predictable policy on wetlands compensatory mitigation in Alaska.
- The Governor and Legislature must continue opposition to EPA's preemptive 404 (c) veto. The regulatory permit process should be allowed to function and not have the Federal government make unilateral land use decisions in Alaska.



The Alaska Minerals Commission appreciates the public's interest in these issues and the support of the Alaska minerals industry. Please feel free to contact the Alaska Minerals Commission with comments or concerns at any time.

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Selected Mines in Alaska