

# Report of the 2013 Alaska Minerals Commission



Drill rig on Millrock's Estelle Project  
Millrock Resources

The Alaska Minerals Commission (Commission) serves in an advisory capacity to the Governor and the Alaska State Legislature (Legislature). Its role is to recommend ways to mitigate constraints on mineral development in Alaska. This annual report fulfills that mandate.

Commission members are appointed by the Governor, the President of the Senate, and the Speaker of the House. Current members represent the placer, hard rock, and coal mining industries across the state. Created by the Legislature in 1986, the Commission's authorization continues through 2014.

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Introduction

The State of Alaska continues to take positive steps to attract mining industry investment. It aggressively defends the state’s right to develop its resources, reforms and streamlines regulation, and works with industry to develop transportation and energy infrastructure. Overall, the actions by the state this past year continue

to send the message that Alaska is open for business investment. These actions signal that responsible mineral resource developers are welcome and will be treated fairly. The state is on the right course and the Commission encourages the administration and Legislature to continue these initiatives.

The Commission specifically recommends the following actions on five major issues:

ISSUE:	ACTION ITEM:
1. Tax Climate / Resource Revenue Sharing	Reform tax policy for revenue sharing
2. Transportation Infrastructure	Support administration’s initiative
3. Education	Support K-12 and college level resource education
4. Federal Intervention	Encourage legislative funding to continue legal relief
5. Division of Geological & Geophysical Surveys Funding (DGGS)	Encourage administrative and legislative funding of DGGS and the Alaska Geologic Materials Center



Developed wetlands at Fort Knox  
Bill Jeffress, SRK

## Improve Tax Climate for Mineral Investment and Resource Revenue Sharing

Local communities should benefit when a resource-based investment is made in rural Alaska. Whether related to long-term large-scale mining or short-term seasonal prospecting, the economic boost to local economies from mining development is sometimes accompanied by increasing challenges for communities to provide local government services.

Affected communities should be assisted by a reallocation of the State of Alaska Mining License Tax (AS 43.65). The State of Alaska Mining License Tax applies to all mining operations, regardless of land status, size, or location. Presently there is no uniform mechanism to allocate a portion of the tax revenues back to communities associated with mineral resource development. Such a revenue sharing model is effective in the Alaska fishing industry and the Gulf of Mexico oil and gas industry.

Sharing portions of state revenues 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. With uncertainty of the timing and size of a local tax, the threat alone can discourage the very investment needed to advance projects. Moreover, allowing local governments to impose potentially onerous severance taxes inappropriately shifts control of development decisions away from the state. This precludes the state from fulfilling its mandate to manage state-owned resources in a way that maximizes benefits to all Alaskans.

### Recommendation:

- Portions of the existing statewide mining license tax collected from mining operations, regardless of land ownership, should be allocated to communities near mining developments. Simultaneously, the municipal tax code should be revised to preclude local municipal severance taxes on mineral resources.



NANA Upper Kobuk Mineral Project  
NANA/Chris Arend Photography



Pogo mine pours two-millionth ounce of gold  
Judy Patrick Photography

## Transportation Infrastructure

The Commission thanks the Governor and the Legislature for supporting the Roads to Resources program, and encourages ongoing support for infrastructure in rural Alaska.

Alaska can leverage private development with statewide transportation plans through partnerships. Transportation investment that supports mineral development expands rural infrastructure, reduces the cost of living, and plays a critical role in lowering energy costs. State participation in the Alaska Industrial Development and Export Authority's (AIDEA) Delong Mountain Transportation System was a key factor in developing the Red Dog Mine. This multi-user haul road and port remains available for other mineral development in the region. Further use of this type of partnership can help advance mine projects and provide benefits to the rural regions hard hit by the high cost of energy.

The increase in activity in the Arctic for shipping, energy, and mineral development necessitates additional supporting infrastructure and an increased presence by the U.S. Coast Guard. The need for deep water ports in the Arctic associated with this increased activity provides an opportunity to coordinate roads to potential ports with mineral development projects.

Critical and strategic minerals, including those bearing rare earth elements, are essential to future Alaska resource development. These elements are crucial to the production of advanced weaponry and a wide array of electronic, automotive, and alternative energy products. China

produces most of the world's rare earth elements, controls the market, and retains the bulk of these elements for its own needs. This poses an unacceptable risk to the national and economic security of the United States. Infrastructure planning in Alaska should take into account access to these critical and strategic minerals.

Transportation plans must stem from regional and project specific needs in concert with statewide planning. Local support is critical for projects to advance. A good example is the growing interest from local levels for roads in Northwest Alaska and the coordination between the Alaska Department of Transportation and Public Facilities, AIDEA, industry, and communities on viable projects.

### Recommendations:

- Continue public outreach, environmental studies, and engineering studies for roads in Northwest Alaska (i.e., the Ambler Mining District Access) through the Roads to Resources Initiative.
- Support financing options, including public-private partnerships that lead to restricted use roads that facilitate industrial use while recognizing local residents' concern for limited access to traditional subsistence areas.
- Investigate transportation corridors throughout prospective areas of Alaska that facilitate mineral development and access to critical and strategic metals, thereby lowering the cost of living including more affordable energy.



Red Dog Mine  
NANA/Chris Arend Photography

## Education

Science and engineering education within grades K-12 and at the university level is vitally important to prepare students for careers in the mining industry. The Commission recommends support for two important initiatives in 2013: The University of Alaska (UA) Consolidated Alaska Minerals Initiative (CAMI); and, the Alaska Resource Education (ARE) Google Earth minerals curriculum.

### *The University of Alaska*

UA is uniquely positioned to support the education, training, and research needs of the mining industry. In 2012, the Commission recommended UA further analyze ways to respond to industry needs. UA responded by establishing the University-wide CAMI. The CAMI is an internal committee formed to develop guiding recommendations that shape the University's response to the mining industry. The Commission recommends regular dialogue between the University and industry during this process.

The Commission applauds the effort by UA to create CAMI, but stresses the need for a unified approach that utilizes the strengths and regional connections of each campus to achieve meaningful and lasting results. A single site, center, or campus does not have breadth or reach to address all of the needs of the mining industry, but through cooperation the individual campuses can achieve this goal. The Commission hopes UA also comes to this conclusion and establishes a state-wide Mineral Resource Network with centers of mining excellence at each campus to promote collaboration, resource sharing, and cooperation within the mining, geology, and mine training programs. The Commission recommends support from the state for UA to bring together the mining-related components of its campuses through the CAMI.

### *Alaska Resource Education*

ARE provides an invaluable resource to help teachers and parents educate K-12 students in the state about Alaska's natural resources. In 2012, ARE put 66 teachers through its 500 level graduate "Rock & Roll Around Alaska" course. Individually, these teachers educated an average of 60 students on the importance of resources in Alaska.

A new and exciting development is a Google Earth minerals curriculum where teachers and students will be provided an unbiased, scientific, and career centered experience presenting the minerals industry in a cutting edge geospatial format. This curriculum, when developed, will provide virtual quests for students (grades 7-12) to explore the history, economics, environment, safety, property, infrastructure, site life, regional culture and traditions, and possible careers from eight mineral resource locations throughout Alaska.

Directly aligned with the national and state focus on science, technology, engineering, and mathematics (STEM) education, this project launches Alaskan classrooms into applied and relevant academic experiences. Specific STEM centered skills enhanced through this curriculum include 21st century research skills, technologic proficiency, and scientific literacy rooted in real-world contexts. The Commission recommends appropriating an additional \$100,000 towards developing a pilot location for ARE's new Google Earth high school curriculum in addition to maintaining its current annual funding of \$100,000.

### **Recommendations:**

- Support the University's effort to address the needs of the mining industry through the CAMI.
  - Encourage collaboration and regular dialogue between the mining industry and University through the CAMI and its development of recommendations to the University.
  - Establish a state-wide Mineral Resource Network with centers of mining excellence at each of the UA campuses.
- Preserve ARE's current funding level of \$100,000 and appropriate an additional \$100,000 to the Google Earth minerals curriculum.



## Legislative Funding to Oppose Federal Intervention on Mining Projects

Complex environmental issues require regulations that are broad, all-encompassing, and adjustable as new information is made available. Regional or national environmental issues are often reflected in regulation. Certain issues are regulated at the federal level, others at the state level, and others still at both the state and federal levels. Federal regulations are generally developed around issues and criteria relevant to the lower 48 states. These same criteria and concerns are often not directly applicable to Alaska.

Alaskan resource development projects face increasing federal intervention that prevents the State of Alaska from developing its natural resources. Alaska is facing federal intervention from legally unprecedented regional assessments targeted at stopping development of large world-class deposits. The most current example of this type of federal intervention concerns the Pebble Deposit, where an entire watershed, larger than some states, is under evaluation by the U.S. Environmental Protection Agency for potential closure to natural resource development. This action, which could significantly impede economic development and stability in an economically

depressed area, hinges on a report based on outdated mining methods without consideration for current technology, regulations, and/or mitigation practices. Federal intervention is also occurring to small mine operations through federal takings that prevent small mine owners and operators from accessing or developing their claims.

Federal intervention also extends to the recent regulatory act to implement Emission Control Areas (ECA), which imposes the use of more expensive fuel for all shipping activity within all U.S. coastal waters. These control areas are not supported by scientific research and do not consider the economic impact on our state where the shoreline is so extensive and shipping is a crucial form of transporting goods.

### Recommendation:

- To maintain Alaska's right to develop its resources (large and small) and to fend off precedent-setting court cases, the State of Alaska must have funding available for expert witnesses, attorney fees, court costs, and staff resources.



Linc Energy's core operations on the West side of Cook Inlet  
Mike Hagen, Linc Energy

## Division of Geological & Geophysical Surveys Funding

### *Impacts of Retention and Recruitment Difficulties in State Government*

Heightened activity in natural resource exploration and development is welcome news for the state and nation. A healthy economy, creation of high-paying jobs, and maintaining state revenues are the clear results of an active and healthy resource industry.

There are challenges created by an active industry, including much greater demand for baseline scientific information, increased need for timely permitting, and access to the resource base. These critical links of the development chain can only be maintained by experienced, dedicated staff within state government. Large vacancy rates and inexperienced or inadequately trained state personnel can significantly dampen economic activity when it is needed the most.

Jobs within the resource industry historically pay more than government. Until recently, somewhat less cyclical job security, greater benefits packages, and more stable work environment within state service leveled the competitive playing field for employees. However, recent increases in industry salary scales, combined with the reduction in benefits within the state, significantly impact this balance. An example of this is observed in recent staff changes at the Alaska Department of Natural Resources (ADNR) Division of Geological & Geophysical Surveys (DGGS), which provides scientific data for resource exploration and management.

During January 2012, seven DGGS employees resigned from its geologic research staff. That accounted for 35 percent of the research staff leaving the division in one month. Six of those employees left for much higher paying jobs in industry, including two who more than doubled their salaries. Current salaries for minerals geologists in the private sector average 35 percent more than similar jobs at DGGS.

The most concerning shift in vacancies are three positions within the DGGS Mineral Resources section, which is the source of geologic data critical to facilitating industry exploration activity.

The importance of maintaining experienced qualified staff within state government cannot be overstated. The data that is generated from the work links directly to attracting industry investment and ensuring economic success. The state needs to actively address this retention issue through improving salary competitiveness for state geologists within the DGGS. A number of actions can be taken to actively address this issue.

#### **Recommendations:**

- Explore means to increase salaries within DGGS to improve competitiveness with industry.
- Implement a more flexible pay system by providing exempt status for minerals section geologists similar to the state's oil and gas geologists.

### *Alaska Geologic Materials Center*

The Alaska Geologic Materials Center (GMC) is the state's archive of geologic samples collected by mineral and oil and gas exploration companies and state and federal agencies since the early 1900s. The facility is used heavily (400-500 visits per year) by industry, government, and academia to support resource exploration, land-use management, and research. The archive contains core samples and cuttings of 12 million feet of oil and gas exploration and production drilling. The collection also includes a quarter million feet of diamond-drill mineral exploration core samples, as well as collections from U.S. Geological Survey, Bureau of Land Management, Minerals Management Service, and the former U.S. Bureau of Mines. New collections are added every year.

For years these materials, occupying roughly 30,000 square feet of storage area, exceeded the capacity of an aging former state fish hatchery in Eagle River. Due to a lack of heated space, approximately half the collection is currently stored outdoors in 60 unheated, unlit portable shipping containers. The facility lacks sufficient space and equipment for proper sample processing, layout, and viewing. Quoting the 2006 GMC Concept Study, "The lack of additional storage capacity coupled with inadequate processing and scientific examination space has resulted in a crisis situation – if a new repository is not developed soon, the State of Alaska, federal agencies, private industry, and the public will be at risk of losing irreplaceable scientific resources."

The sample collection stored at the GMC is an invaluable geologic library – a first stop for nearly all geologic resource exploration projects in Alaska. Replacing the collection, if even feasible, would likely cost hundreds of millions of dollars. A modern facility with proper environmental controls, examination space, and equipment is critical to the state's resource development and will pay for itself many times over in future revenues. The ADNR completed initial scoping and feasibility analysis for facility upgrades and replacement. ADNR also secured partial funding for architectural and engineering design. ADNR must stay diligent in pursuit of the remaining funding in order to mitigate this critical situation as soon as possible.

#### **Recommendation:**

- Continue to support and upgrade the Alaska Geologic Materials Center.



The Alaska Department of Commerce, Community, and Economic Development (DCCED) is tasked with facilitating the Commission's work. This publication was released by DCCED as required by AS 44.33.431 (d). This report does not constitute an official position or opinion by DCCED.

The purpose of this publication is to report the findings and recommendations of the Alaska Minerals Commission to the Governor and to the Legislature of Alaska. It was produced at a cost of \$2.75 per copy and printed in Fairbanks, Alaska. This publication is required by Chapter 98, Session Laws of Alaska, as amended by Chapter 4, Session Laws of Alaska, 1993.