



REPORT OF THE 2004

Alaska Minerals Commission

The Alaska Minerals Commission was created by the 14th Legislature and signed into law on June 6, 1986. The enabling legislation instructs the Commission to make recommendations to the Governor and Legislature on ways to mitigate constraints, including governmental constraints, on the development of minerals, including coal, in the state.

ALASKA MINERALS COMMISSION

JANUARY 2004

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FOREWORD

The Alaska Minerals Commission, authorized until January 2014, was created by the 14th Legislature and signed into law on June 6, 1986. The Governor, the President of the Senate, and the Speaker of the House appoint the commission. The current members represent the placer, hard rock, and coal mining industries and come from diverse areas of the state. The enabling legislation instructs the Commission to make recommendations to the Governor and Legislature on ways to mitigate constraints on the development of minerals, including coal.

Many important commission recommendations have been implemented since the first report in January 1987. Highlights during 2003, however, were limited to completion of expedited land transfers along the Denali Highway, and legislation to address the public interest litigants issue. These actions were important incremental gains, but significant obstacles to mining industry growth and desperately needed rural development remain.

During 2003, the Commission conducted a teleconference work session and held a public meeting in Anchorage. The recommendations in this report are the result of input at the work session and the meeting. On behalf of the Commission, I would like to express appreciation to those members of the public, the Alaska Miners Association, the Resource Development Council, and the many government agencies and private organizations that contributed to the preparation of the report. The Commission wishes to thank Commissioner Edgar Blatchford of the Department of Community and Economic Development. Division of Trade and Development staff, Dick Swainbank (retired), Frankie Pillifant, and Rich Harris, provided valuable administrative and professional support. Diane Somers expertly formatted and assembled the report for publication and printing.

Irene Anderson, (Chair)
ALASKA MINERALS COMMISSION

ALASKA MINERALS COMMISSION

2004 Report to the Governor and Alaska State Legislature

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EXECUTIVE SUMMARY

CURRENT RECOMMENDATIONS

The commission encourages the Governor and Legislature to act on the following recommendations in 2004:

- Carefully consider the ADEC Report: The State of Alaska Assumption of the National Pollution Discharge Elimination System. If the program presented is beneficial to the State, pursue and fund State primacy.
- Vigorously defend the new Public Interest Litigant statute against legal challenges.
- Continue to develop more efficient and timely permitting processes.
- Develop mixing zone regulations.
- Assist in infrastructure development to benefit mining and other industries.
- Modify the statute governing rural airstrips to include commercial entities.
- Resolve land tenure, navigability, and right of way access issues.
- Acquire baseline geological and environmental knowledge statewide.
- Support the Alaska Minerals & Energy Resource Education Fund
- Provide adequate budgetary support to the UAF School of Mineral Engineering maintaining the school as a separate entity so that its mission is not diluted through assimilation into broader programs.

INDUSTRY OVERVIEW

The total value of Alaska's mining industry has leveled off in recent years and is expected to remain near the \$1 billion level in 2003. Red Dog, Fort Knox and Greens Creek, Alaska's only major metal mining operations, and Usibelli Coal Mine, all turned in a strong performance and contributed significantly to the employment base and economic vitality of their respective host communities and rural regions. Some existing operations and pre-development projects achieved important milestones. The completion of the EIS and supporting state and federal permitting requirements for Greens Creek's tailings expansion, will allow continuation of operations at this major silver and base metal mine for many more years. The Pogo gold mine EIS was completed in late September and should pave the way for permits to allow mine construction in early 2004. Couer Alaska, Inc., operator of the Kensington gold project north of Juneau, anticipates completion of their Draft Supplemental EIS in Late January. They are also pursuing a legislative land exchange with the Cape Fox and Sealaska native corporations. The latter will facilitate sound mining development at Kensington by consolidating private ownership and increasing the role of state government in the environmental regulatory process.

Strong gold prices did encourage some developers to move advanced exploration projects to the next stage. Rock Creek near Nome advanced to full feasibility and could achieve production as early as late 2005. Pre-feasibility studies in progress for the giant Donlin Creek gold project northeast of Aniak envision a production decision by 2007. Key project drivers undoubtedly include formidable infrastructure challenges.

Significantly improved gold (Au), silver (Ag), copper (Cu), nickel (Ni) and platinum group element (PGE) prices also stimulated exploration activity at known mineral occurrences near the transportation corridors. The large Pebble Cu-Au exploration project, only 15 miles northwest of Iliamna and 80 miles along a proposed road route from Cook Inlet, could potentially be a very economically significant project. A major mine complex at Pebble would require massive capital investment and provide thousands of jobs. Expedited land transfers along the Denali Highway pumped new life into a Cu-Ni-PGE exploration effort near Paxon. A similar geological setting hosts the giant Noril'sk Ni-PGE deposits in northern Russia. The Union Bay PGE prospect in Southeast Alaska was also active in 2003. Grass roots exploration (programs designed to make new mineral deposit discoveries) activity was very limited and continued the general downward trend of the last several years.

The Minerals Branch of the Alaska Division of Geological and Geophysical Surveys (DGGGS) continued to provide quality data under difficult budgetary constraints. They released a geological map of the Salcha River – Pogo region near Delta, and conducted geological field work in the Livengood area north of Fairbanks. The Council airborne geophysical survey (2002) was released, but state funding was not sufficient for resumption of DGGGS airborne surveys in 2003. This funding must not only be restored but should be increased by orders of magnitude. Detailed airborne geophysical data and geological maps are not only critical components of successful mineral exploration and development, but they are also essential in all aspects of land use planning. A healthy and growing mining industry as well as competent state management of mineral and other natural resources requires a much more substantial and consistent annual investment in basic geological data acquisition. Alaska is one of the most poorly mapped regions of the world and ranks far behind many third world countries in spending for geologic data acquisition.

The global mining industry is rapidly expanding in response to explosive demand for mineral commodities in developing countries, but poor infrastructure, a minimal geologic database, and the perception that Alaska can be a difficult place to do business continue as disincentives to exploration investment. Consequently, the potential benefits of a healthy and growing mining industry as an engine for economic development in Alaska remain elusive, particularly in rural areas of the state where they are needed most. Alaska's mineral rich terrain and high discovery potential are universally acknowledged, but mining industry growth will not reach its potential without an increase in exploration activity and continued improvement in the business climate.

FINDINGS AND RECOMMENDATIONS

PART A: ISSUES REQUIRING STATE ACTION

A1) REGULATORY REFORM

A1a) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PROGRAM PRIMACY

FINDING: The State does not have primacy over the NPDES program in Alaska as it does in air quality. The EPA currently conducts permitting, compliance, and enforcement. NPDES permitting is the greatest obstacle to timely development of mines in Alaska. State control of this program may allow for greater coordination with other State agencies during the permitting process, making the process more efficient and the requirements better fitted to the unique conditions often found in Alaska.

The state Legislature funded a study to determine if the state of Alaska should assume NPDES program primacy, as it has in air quality. The study report should be presented to the Legislature during the 2004 session. The report will include the pros and cons of program primacy, the funding requirements if adopted, and a preview of what the program and regulations will look like. State primacy may allow more efficient and timely administration of NPDES permitting and more effectively address Alaska unique water issues, while maintaining high environmental standards.

THE COMMISSION RECOMMENDS THAT:

A1a) The Governor give careful consideration to the ADEC NPDES primacy report. If the program presented in the report is beneficial to the state the Governor should seek legislation and funding for NPDES program primacy, so that the State will have full responsibility for regulating discharges to Alaska's waters.

A1b) LITIGATION REFORM

FINDING: The Minerals Commission supported the adoption of the Public Interest Litigant legislation passed in 2003. The former rules allowed frivolous and capricious litigation to be brought against developers and the government, without risk of paying court costs. The strong threat of suits, even after a lengthy public process, has been a major deterrent to exploration and development investment. The new legislation places mining companies (and other industries) on equal status with any party bringing a civil action seeking judicial review of Administrative Agency decisions. This legislation is very positive and will increase investor confidence immeasurably. Unfortunately, a legal challenge to the legislation was lodged in mid 2003.

THE COMMISSION RECOMMENDS THAT:

A1b) The Administration vigorously defend the new Public Interest Litigant statute against legal challenges.

A1c) PERMIT EFFICIENCY

FINDING: A key element in marketing Alaska as an attractive and competitive place to do business is the ability to process permit applications in a responsible, consistent, predictable, and expeditious manner. In the 2001 legislative session, funding was provided for the Alaska Department of Environ

mental Conservation (ADEC) to reconstitute the qualified core of the water quality permitting staff. Equally important to adequate funding, the agencies need the flexible management tools necessary to provide responsive, effective, and efficient management of permitting issues.

Through consolidation of permit administration under DNR, and direction by the DEC Commissioner, the permitting process for mining operations is becoming more streamlined. Permit coordination under DNR and aggressive review of backlog permits by DEC appears to improve both timeliness and cooperation, making the process reasonably predictable while reducing the burden of the permitting process.

DEC initiated the use of third party contractors to supplement the permitting process. A staple of contractors is used to support internal staff, so that knowledge gain and retention remains within DEC. DEC must maintain the functional capability to use contractors across all disciplines.

Under this administration, timeliness of responsible and reliable permitting has been a key priority. Professional staff has been added in both Air and Water Quality to reduce the backlog of permit applications. Continued efforts need to be made to ensure that the permitting process is not unnecessarily extended. Initial permit application review should result in a single and complete list of information deficiencies. Additional requests for information should be limited to questions arising out of **new** information. The timeliness of permitting is also often affected by late intervention and additional requests for information by accompanying federal agencies. Late intervention instead of continued joint participation results in delayed issuance of permits. This delay should be minimized or eliminated by federal agency participation concurrent with the state process.

The Alaskan industries, Agencies, Administration, and Legislature can work together to provide responsible and reliable permitting that ensures the protection of the environment, predictability to permittees and a sound future. Coordination with Federal Agencies must be improved among all parties to make the permitting process more efficient. This cannot happen if we are complacent and try to improve permitting efficiency through funding alone. All of the recommendations provided must occur in concert for Alaska to fulfill the potential for sustainable and attractive resource development.

THE COMMISSION RECOMMENDS THAT:

- A1c.1) The Administration continue to seek efficient and timely permitting by maintaining high quality internal staff and using third party contractors to support the permitting process.
- A1c.2) The Legislature require a **periodic permitting status report** accounting for agency staff and management.
- A1c.3) The Administration seek improved participation and coordination by Federal Agencies when participation is required in the permitting process.

A1d) MIXING ZONES

FINDING: State water quality regulations that became effective in November 1997 contain a prohibition against mixing zones in anadromous or resident fish spawning areas. This overly-broad language makes it more difficult to consider site specific conditions, such as the productivity of the spawning area compared to the potential benefit of a municipal waste treatment plant or industrial project that might require a mixing zone. Without flexibility in the regulation, many projects that could significantly improve the health and welfare of people throughout Alaska may be precluded due to the widespread presence of spawning fish, including resident fish. Prior to promulgation of the latest mixing zone regulations, the Alaska Department of Environmental Conservation (ADEC) considered language that could have allowed mixing zones if either the discharge had no adverse effect on spawning or if all reasonably anticipated adverse impacts were satisfactorily mitigated. This type of discretionary flexibility needs to be incorporated in the regulations so future projects that may be beneficial are not automatically prohibited a priori.

THE COMMISSION RECOMMENDS THAT:

- A1d) The Governor direct the Alaska Department of Environmental Conservation to make use of the opportunity provided by the triennial review of the State water quality standards to develop mixing zone regulations that will, at the department's discretion, authorize mixing zones in spawning areas if reasonable economic alternatives are not available, and:
- (a) The discharge is not reasonably anticipated to adversely affect the capacity of the area to support present or future spawning activities; or
 - (b) The discharge is reasonably anticipated to adversely affect the capacity of the area to support present and future spawning activities and there is an approved plan to mitigate all reasonably anticipated adverse impacts.

A2) ACCESS & INFRASTRUCTURE

FINDING: The lack of infrastructure, including roads, airports, and power transmission networks, increases the costs of mineral exploration, development, and mining. High costs decrease the rate of mineral deposit discovery and subsequent development, and render Alaskan mining operations less competitive in the global marketplace. This all limits mining industry growth and slows economic diversification, particularly in rural areas.

Extensive areas of Alaska are unavailable for resource development because they have been set aside as parks and refuges. The remaining areas of Alaska that are not designated as wilderness constitute the land base that must support our society. Even though these non-wilderness areas are often beautiful or wild in their own right, they were not the crown jewels that justified prior withdrawal. Infrastructure development in these areas must be supported and projects that have the potential to significantly enhance the viability of local communities should be encouraged first.

A2a) ROADS TO RESOURCES

FINDING: Many of the major mineral and coal deposits in Alaska are "stranded" and remain undeveloped because there is no road access to existing road and/or rail, major rivers, or to tidewater. The last major road built in the state was the 52-mile road from the Red Dog Mine to the DeLong Mountain Transportation System port near Kivalina in 1988.

Public road access could benefit many areas, including the Ambler mineral belt, the northwest Arctic and Beluga coalfields, the area around and west of Iliamna, the McGrath to Aniak region, and the Goodpaster mining district.

Although Alaska Statutes AS 19.30.020 and 19.30.030 address development access roads, the funding available, even if inflation adjusted, would probably not even begin to cover the costs of permitting.

During the next few years it is possible that significant funding for access improvement might be available through GARVEE (Grant Anticipation Revenue Vehicle) bonds, the Denali Commission, and special federal appropriations similar to those used in Appalachia.

THE COMMISSION RECOMMENDS THAT:

- A2a) The Governor direct the Department of Transportation & Public Facilities to prepare a prioritized list of potential "Roads to Resources", and investigate mechanisms whereby funds can be made available for a long-term program. This program would ideally create unrestricted public road links between potential resource development areas and existing overland supply lines (roads and/or rail), major rivers, or tidewater.

A2b) RESTRICTING THE USE OF MINING AIRSTRIPS

FINDING: In many remote mining camps, the only feasible summer access is by use of an airstrip on, or adjacent to, the mining operation. Unauthorized use of these strips, often by commercial operations, can result in potentially unsafe conditions, and the attendant threat of liability, both to the miner and to the State.

THE COMMISSION RECOMMENDS THAT:

A2b) The Legislature modify the current statute to include commercial entities as well as individuals.

A2c) POWER SUPPLIES

FINDING: Major mines typically require substantial (20-50 megawatt) power supplies, and additional or extraordinary processing requirements can significantly increase that demand.

Many remote mines must generate their own power using costly modular diesel generating sets. A more synergistic strategy would use mines as a “base-load” to justify inter-tie extensions and/or new off-site power plants. For example, mining developments at Donlin Creek, or Pebble Copper might justify an intertie from the Cook Inlet area to Bethel and the villages of the Yukon-Kuskokwim Delta. This alternative could help incrementally extend power-by-wire to remote villages, stimulate new mineral exploration and development, and accelerate economic diversification. Many of these villages presently rely on Power Cost Equalization funds to reduce the high cost of electrical energy.

THE COMMISSION RECOMMENDS THAT:

A2c) The Governor and Legislature continue to support the Alaska Industrial Development & Export Authority/Alaska Energy Authority, Alaska Village Electric Cooperative, and the Southeast Intertie in extending electrical grids into areas where mineral development is occurring or anticipated.

A3) STATE’S RIGHTS ISSUES

These issues have been segregated because although they are also about ownership and access, both of which are fundamentally important in mineral investment decisions, two of them are not exclusively Alaskan issues, and allow for cooperative efforts with other states at the federal level.

RS 2477 trails may offer the only access across lands in Alaska where ownership patterns have changed and become more complex since statehood. Similarly, navigable waterways can provide the cheapest form of transportation for some mineralized areas, and some are inherently important sources of placer gold.

Western States have as much a vested interest in RS 2477 access as does Alaska, and all states have an interest in ownership of the riverbeds and water columns of navigable rivers and lakes.

A3a) RS 2477 TRAILS

FINDING: In 1993 the Legislature appropriated funds for a task force to create an RS2477 trail inventory. Since 1993 there has been no funding to pursue Alaska’s RS2477 trails through ‘quiet title’ action. The Alaska Division of Land has researched 1,950 trails proposed as RS2477 rights-of-way. Of these, 620 routes appear to qualify, about 250 need more information, and the remainder may not

qualify due to circumstances such as lack of evidence, duplication of existing rights-of-way, or failure to meet the requirements of the RS2477 law.

The State has achieved Quiet Title to the Harrison Creek – Portage Creek Trail (RST 8) in the Circle Mining District. Because the original trail has been moved many times to accommodate active mining since 1976, (the deadline for identification of existing rights-of-way), the State has entered into a consent decree accepting a mutually agreeable 60-foot right-of-way to substitute for abandonment of portions of the existing trail. This was one of 11 of the 620 “Qualified” trails that were “Certified” as a test case. It was selected for litigation because it had the broadest precedent setting potential.

The Department of Law and the Division of Mining, Land & Water require funds for “quiet title” actions that could establish the validity of these 620 routes.

THE COMMISSION RECOMMENDS THAT:

- A3a.1) The Legislature fund a multi-year, multi-agency Capital Project of \$300,000 annually for the Division of Mining, Land & Water to work with the Department of Law and other agencies to aggressively pursue precedent-setting “quiet title” actions, and to preserve the State’s rights.
- A3a.2) The Governor aggressively assert “quiet title” to the routes with the best documentation. Furthermore, the State should assert an access route pursuant to Title XI of the Alaska National Interest Lands Conservation Act to test the process and set a precedent.

A3b) NAVIGABILITY

FINDING: State ownership of the beds of navigable waters is an inherent attribute of State sovereignty protected by the United States Constitution.

The State of Alaska owns all water columns and the land under most navigable waterways in Alaska. The Submerged Lands Act of 1953, the Alaska Statehood Act of 1958, and the Alaska State Constitution establish State ownership of water columns (actual water that is in a lake or river) and shore lands (the beds of navigable rivers). The courts have defined navigable waters as those used **or susceptible to use** for travel, trade, and commerce at the time of statehood.” (Emphasis added).

This interpretation would include not only the obviously navigable waterways such as the Yukon, Kuskokwim, Tanana, Fortymile, and Kobuk Rivers, but many smaller rivers used for travel. Some of the rivers that could be considered navigable, such as Birch Creek and the Fortymile River, contain important placer gold deposits.

While title to the beds of navigable waters was vested in the state at Statehood, the federal courts have only ruled on the navigability of 13 waterways in Alaska. Alaska faces two types of legal hurdles in establishing its ownership of lands under navigable waters. The first is to determine what rivers and lakes are navigable under federal law. The second is to establish that the United States did not defeat the state’s title to navigable waters through pre-statehood federal reservations. The state has used the court action (quiet title) to address both of these hurdles by defining the types of rivers and lakes that are navigable under federal law, and to determine whether or not certain pre-statehood federal reservations defeated the state’s title.

In 1980, the State established a comprehensive navigability program within the Department of Natural Resources (DNR). This program was designed to respond to federal land conveyances and land management activities under the Alaska Statehood Act, the Alaska Native Claims Settlement Act, and the Alaska National Interest Lands Conservation Act. The basic purpose of the program was to protect the public rights associated with navigable waters, including the State’s title to the submerged

lands. The program also included monitoring of federal land conveyance and management programs to identify navigability disputes, seeking cooperative resolution of navigability problems through negotiation and legislation, and preparing for navigability litigation.

Budget cuts have greatly reduced the ability of State agencies to respond to navigability issues, and to pursue assertions of State ownership of navigable waters.

THE COMMISSION RECOMMENDS THAT:

A3b) The Legislature make funding available to reinstate a centralized, systematic navigability program within the Department of Natural Resources. Additionally, funding should continue to be made available to the Department of Law to support any “quiet title” actions necessary to secure ownership of submerged lands. Further, the state and federal governments should establish more efficient methods for determining what water bodies are navigable and therefore are state owned.

A3c) EXPEDITED LAND TRANSFERS

FINDING: Because of the high mineral potential proximal to existing transportation, in 1994 the Commission recommended that the State should seek expedited transfer of State-selected lands along the Denali Highway.

Subsequently, about 3,000 mining claims have been staked in this area during the last five years for the copper, nickel, and platinum-group element potential, and over \$3 million has been spent in exploration, including detailed airborne geophysical surveys and limited drilling. However, because of the uncertain ownership of State-selected land, the companies involved cannot justify further expensive evaluation of the area.

On October 4, 2000, the Division of Mining, Land & Water (DMLW) recognized the potential of this block, and requested that 235,000 acres of State-selected land between the Richardson Highway and the Maclaren River be added to the Land Conveyance Priority List (CPL). In June 2002 the State received final Tentative Approval (TA) to 6 of the 10 Townships selected. In an unusual process, TA of the remaining 4 Townships became a very public process. The effort to secure Tentative Approval of the remaining four townships must be pursued.

Furthermore, on September 9th 2002 a request was made to add an additional 25 Townships to the CPL. These 576,000 acres are predominantly north of the Denali Highway between the Maclaren and Susitna Rivers.

THE COMMISSION RECOMMENDS THAT:

A3c) The Governor and the Legislature direct the Division of Mining, Land & Water to aggressively pursue expedited transfer of State-selected lands along the Denali Highway where there is demonstrated potential for mineral development.

A4) DATA ACQUISITION

Many potential investors in Alaska’s mineral industry are discouraged by the lack of detailed geologic information, and choose to invest in areas that have more public data to guide grassroots exploration. Furthermore, companies that have persevered and identified prospects worthy of development find that they are expected to fully define the baseline data of the whole area surrounding their discovery because no such database exists.

A4a) GEOPHYSICAL AND GEOLOGICAL MAPPING

FINDING: Since 1993, State-funded airborne geophysical surveys have covered approximately 8,500 square miles of the State of Alaska's 162,500 square mile land entitlement, at a total cost of \$ 3.69 million. Additional funding has been invested by the State to complete "ground truth" geologic mapping necessary for interpretation of the airborne surveys.

An additional \$2.0 million has been invested by the Bureau of Land Management (BLM) and other entities to survey about 5,000 square miles of predominantly federal land in the state.

During this same period, the mining industry has invested nearly \$400 million in exploration, and has staked thousands of new claims based on the results of the surveys.

This increased activity was the intent of the surveys and will accelerate discovery of new Alaskan mineral deposits. However, with a land base of 162,500 square miles, much of it chosen for its mineral potential, it will take the State of Alaska another 150 years to survey its land endowment at the present rate of funding.

THE COMMISSION RECOMMENDS THAT:

A4a) The Governor and the Legislature invest \$5 million per year (approximately 20% of what industry spent on exploration in 2003) for the next decade, preferably through foundation funding, in airborne geophysical surveys and complementary geological and geochemical surveys.

A4b) BASELINE DATA

FINDING: Water quality regulation in Alaska is growing increasingly complex. Often, the Alaska Department of Environmental Conservation (ADEC) is required to make decisions about water quality regulations without Alaska-specific data. Many Alaskans recognize the need to develop sound environmental baseline information. This research should extend to development of appropriate aquatic life criteria for acute and chronic toxicity under Alaska conditions.

THE COMMISSION RECOMMENDS THAT:

A4b) The Governor direct the Alaska Department of Environmental Conservation to work with all state agencies to ensure that the Alaska Clean Waters Act provides baseline standards that will encompass all the water quality standards that the resource industry is required to address.

A5) REGIONAL ECONOMIC DEVELOPMENT

FINDING: In many regions of Alaska, mineral development is one of the few sectors that might offer the opportunity for a sustainable economy, to provide family wage jobs, and add significantly to the local tax base (e.g. Red Dog in the Northwest Arctic Borough, Usibelli Coal Mine in the Denali Borough, Fort Knox in the Fairbanks North Star Borough, and Greens Creek in the City & Borough of Juneau).

The following is a specific southeast Alaska regional project that could stimulate mineral development. If successful, such an integrated approach will have application throughout Alaska.

To stimulate investment by the private sector, the mineral potential, land status, infrastructure, and the constraints on development such as archeological sites or essential fish habitat, should be clearly

identified in a GIS (Geographic Information System) database. In addition, communities in southeast Alaska which have been severely impacted by the decline in the timber industry have expressed interest in how they might be able to benefit from the minerals industry.

Based on the economic deterioration in the region, excellent potential for mineral discovery, and a well-developed infrastructure, good candidates would be Prince of Wales Island, the Duncan Canal/Stikine mining districts, and the Haines region.

THE COMMISSION RECOMMENDS THAT:

A5) The Governor and Legislature appropriate \$250,000 for a two-year Capital Improvement Project. This project, administered by the Department of Community & Economic Development, would make relevant information available in a marketing format, and focus on mineral development opportunities in the economically depressed areas around the Porcupine district near Haines, the Duncan Canal and Bradfield regions in the Stikine mining district, and Prince of Wales Island.

A6) EDUCATION AND RESEARCH

A6a) AMEREF

FINDING: The “Alaska Resource Kit” which is being used in the statewide public school system, is an excellent program for educating Alaska’s students in the issues and fundamentals of resource development. The program provides a broad-based resource education for Alaska’s student’s which is critical to their future ability to make well reasoned decisions about the use and protection of Alaska’s wealth of natural resources. The Kit incorporates technical, economic, and environmental aspects into a balanced program that addresses mineral, timber, and energy development.

The Alaska Minerals and Energy Resource Education Fund (AMEREF) is supported by the resource industries. The resource industries completely fund AMEREF’s production and replacement of all teaching materials and ensure the technical accuracy of the material. The resource industries also organize and distribute the education kits. AMEREF is looking to expand the program by obtaining additional funding through various grant programs.

The AMEREF program’s successful integration into the State of Alaska school systems has been the result of past cooperative efforts between AMEREF and the Alaska Department of Education. Up until 2003, the State budget provided AMEREF with funding for a Department of Education position. This position was specifically designed to work with AMEREF to ensure that the curriculum was developed in a manner that would meet State standards. This position also provided teacher training to familiarize Alaskan teachers with the program and to facilitate its application in the classroom.

THE COMMISSION RECOMMENDS THAT:

A6a) The Governor and the Legislature appropriate \$50,000 to the Division of Teaching and Learning Support, Minerals and Energy Education Program for curriculum development of the Alaska Mineral and Energy Resource Education Fund (AMEREF). Industry will continue to support all AMEREF materials, but the State’s support in funding Department of Education approved curriculum development is essential to the program’s integrity.

6a) SCHOOL OF MINERAL ENGINEERING

FINDING: The University of Alaska is a Land, Sea and Space grant college founded on its School of Agriculture and its School of Mines. The present day University of Alaska Fairbanks (UAF) School of Mineral Engineering offers accredited degree programs for educating mining, geological, and petroleum engineers and conducts applied research through the Mineral Industry Research Laboratory and Petroleum Development Laboratory.

Local hire of Alaskans in the mineral exploration and mining field is dependent on an educated population base. The professional degree and research programs presently offered by the UAF School of Mineral Engineering are vital to the continued development of the state's mineral and energy industries, and to the jobs and incomes of its residents.

Preservation of the UAF School of Mineral Engineering will help position Alaska as a globally competitive mining leader.

THE COMMISSION RECOMMENDS THAT:

- 6a) The Governor and Legislature provide adequate budgetary support to the UAF School of Mineral Engineering, maintaining the school as a separate entity so that its mission is not diluted through assimilation into broader programs.

PART B. FEDERAL ISSUES OF STATE CONCERN

B1) TAILINGS IMPOUNDMENT CLASSIFICATION

FINDING: When the Clean Water Act was written there was a specific exemption written to exclude waste facilities created by impounding water from "waters of the United States." Effectively, this exemption provided for the construction and use of tailings impoundments. The exemption was later supported by two other U.S. Army Corps of Engineers memos.

Recent regulations, however, resulted in the reclassification of all mine waste, including tailings, from "waste" to "fill" for the purposes of compliance with wetlands regulations. While this reclassification has been helpful for the placement of mine waste rock, it has resulted in confusion over the continued validity of the exemption for tailings impoundments. The U.S. Army Corps of Engineers has interpreted this ruling to mean that tailings impoundments no longer impound "waste" but "fill" and therefore are no longer "waste facilities". If no longer exempt under the waste facility interpretation, tailings impoundments might be considered waters of the United States. Consequently, a discharge of tailings slurry into an impoundment might be required to meet state and federal water quality standards, including an impossible limit of less than 20 mg/l TSS.

Tailings impoundments serve as a means of solids disposal and, if they are unable to consume all of the associated water in a recycle process, they serve as a retention phase to water treatment facilities. The requirement to meet state and federal water quality standards within the impoundment is impractical, it does not allow for water storage for recycle purposes or to facilitate treatment prior to discharge, and it does not allow for the disposal of solids. This regulatory interpretation stands to increase the use of water resources to impede practicable and attainable water treatment, and to eliminate the most common and often only means of safe tailings disposal.

Some states are able to work around this issue by placing liners under their impoundments which allows them to be classified as artificial ponds, and thus exempts them from the "waters of the United States" classification. This solution is not always practicable in Alaska due to geotechnical conditions,

including the effects of the underlying permafrost. Also, because tailings impoundments are usually placed in a basin, to secure the integrity of the structure, it is not feasible to avoid the use of wetlands for tailings impoundments.

Two possible solutions may help to remove the regulatory confusion. Tailings impoundments could either be classified by the state as waste water treatment works, or as disposal sites. Either classification should exempt the site from the classification of "waters of the United States" and the related requirements. It is the opinion of The Commission that the State should classify tailings impoundments as disposal sites as this more accurately describes the permanent placement of solids at the site and allows greater regulatory flexibility in managing the site. All discharges from the impoundment would continue to require compliance with all state and federal water quality standards.

THE COMMISSION RECOMMENDS THAT:

- B1) The federal and state agencies work together to clarify that disposal of tailings into wetlands is either regulated as a treatment works or as a disposal site, and that said regulations would not require tailings and associated waters to comply with water quality standards until discharged from the tailings area.

B2) MARINE TRANSPORTATION TASK FORCE

FINDING: Requirements of the Jones Act continue to impede reasonable resource development opportunities in Alaska. Originally the Merchant Marine Act of 1920, the Jones Act requires that ships operating within the United States be built at U.S. shipyards, and that they be owned and crewed by Americans. Drafted shortly after World War I, this legislation grew out of the belief that a strong U.S. merchant marine was essential to maintaining the security of our country.

Several recent studies have concluded that the Jones Act impedes commerce in the U.S. and hampers the development of an efficient intermodal transportation system. However, overwhelming support by Congress and carrier industry as recently as 2000 to maintain the Act in its present form resulted in a collapse of any organized efforts to change the law.

The one sector that is clearly under-served due to the Jones Act is bulk carriage. Bulk shipping by ocean is a service practically nonexistent in the domestic market, and commodity shippers such as mineral companies in Alaska seeking new markets for their products are especially affected.

THE COMMISSION RECOMMENDS THAT:

- B2) Until the Jones Act is repealed, the governor shall publish an annual report documenting the harmful effects of the Act on Alaska commerce, and progress made towards its repeal. The report shall be submitted to the Legislature no later than its convening each year.

B3) DETAILED GEOLOGICAL MAPPING

FINDING: The State of Alaska lacks a comprehensive geological base of information. As a minimum, the state should have, for each 1:250,000 scale quadrangle: 1) a basic geological map, 2) an air-borne magnetic survey at suitable line spacing, 3) reconnaissance stream sediment sampling surveys, and 4) baseline water quality data. Information at this level of detail is necessary to attract investment in mineral resources to the state. The federal government is carrying out very little geological mapping and geophysical surveying, and is not meeting its obligations under the Alaska National Interests Conservation Act (ANILCA).

Section 1010 of ANILCA requires that “The Secretary shall, to the full extent of his authority, assess the oil, gas, and other mineral potential of all public lands in the State of Alaska in order to expand the data base with respect to the mineral potential of such lands...”

This ANILCA requirement was formerly met by the Alaska Mineral Resources Assessment Program (AMRAP), which was funded for several years immediately after passage of ANILCA, and was carried out by the United States Geological Survey (USGS). Over time the amount of funding for the program was cut, and finally the budget line item was eliminated and folded into other USGS programs. The AMRAP program was subsequently cut to the point where it has effectively been dormant since about 1992.

THE COMMISSION RECOMMENDS THAT:

- B3) The Legislature pursue reinstatement of the AMRAP program by lobbying the congressional delegation.

B4) RESOLUTION OF OUTDATED SEGREGATIONS

FINDING: Large tracts of land in Alaska that were “temporarily” withdrawn from public entry more than 30 years ago remain unnecessarily closed. These Outdated Segregations preclude mineral development, deny access to other lands and resources, and prohibit transfer of land selections to the State of Alaska and Alaska Native Claims Settlement Act (ANCSA) corporations.

The land segregations were originally set aside for three primary purposes:

- 1) Selection and conveyance to ANCSA corporations;
- 2) Possible inclusion within federal conservation units; and
- 3) Industrial developments such as alternate candidates for a Trans-Alaska Pipeline corridor.

Until recently, the Bureau of Land Management (BLM) was not motivated or funded to create the land management plans that are required before the land withdrawals can be removed by Congressional action.

In 2002 the Alaska Minerals Commission recommended the Alaska Legislature urge the Congressional Delegation to expedite the process of removing the Outdated Segregations. House Joint Resolution No. 48 was drafted for this purpose and passed.

In 2003, The U.S. Department of the Interior Bureau of Land Management (BLM) is preparing SB 1466. The primary intent of the bill is to accelerate the land conveyance process to the State of Alaska. The bill will also contain language that will rescind certain withdrawals for further classification and study.

THE COMMISSION RECOMMENDS THAT:

- B4) The Alaska Legislature support SB1466 in the form of a supporting resolution, provided that:
- 1) SB1466 contains language that makes rescinded withdrawal lands immediately subject to the public land laws of the United States, and immediately available for mineral entry, and
 - 2) Contains language and funding that allows the BLM to make a detailed inventory of other Alaska land withdrawals that are no longer necessary and that should be rescinded.

B5) ESSENTIAL FISH HABITAT

FINDING: Protection of “Essential Fish Habitat” (EFH) is a key component of the 1996 Sustainable Fisheries Act (SFA), which amended the 1976 Magnuson-Stevens Fisheries Conservation and Management Act (MSFCMA).

Under the SFA, eight Regional Fisheries Management Councils develop Fisheries Management Plans for important fish species, and provide this information to the National Marine Fisheries Service (NMFS). The NMFS has defined essential fish habitats very broadly, and throughout the western states has included all waters currently accessible to salmon. All federal agencies involved in any kind of development are required to consult NMFS if their actions “may adversely affect EFHs.”

This broad mandate will, at best, slow permitting with a complex consultative process, or in the worst case result in project denial or modifications that effectively prohibit resource development. Thus, this poorly defined “Essential Fish Habitat” program has the potential to be at least as onerous as the Corps of Engineers 404 “Wetlands” permitting.

THE COMMISSION RECOMMENDS THAT:

- B5) The Governor and Legislature work with the Congressional Delegation to require the National Marine Fisheries Service to define the scope and application of the “Essential Fish Habitat” program, limit the authority of the NMFS to marine waters, and leave management of anadromous fish within state waters to the Alaska Department of Fish & Game.

B6) ANILCA PROVISIONS

FINDING: In order to assure passage of the Alaska National Interest Lands Conservation Act (ANILCA) in 1980, several sections were included to protect preexisting rights. Several provisions would allow mineral development on or near otherwise withdrawn land. Title XI addressed access across the Conservation System Units (CSU). Sections 101d and 1326b assured that no more land in Alaska would be considered for new CSU or similar designations. Sections 103b and 1302h provided mechanisms for the Secretary of the Interior to adjust the boundaries of CSU or to exchange lands within them to exclude mineralized areas.

THE COMMISSION RECOMMENDS THAT:

- B6.1) The governor assert one “test” RS 2477 Access route through a Conservation System Unit. The test route could be the Aurora Trail through the Bering Land Bridge Preserve in Western Alaska (as listed on DNR 1995 RS 2477 Trail Map); and that
- The Governor and Legislature, through the Attorney General’s office, the State’s Washington D.C. office, and the Congressional Delegation insist that the federal administration:
- B6.2) Prohibit the creation of additional CSU lands in Alaska as required by Sections 101d and 1326b of ANILCA; and
- B6.3) Exchange mineralized areas from existing CSU under the authority of Sections 103b and 1302h of ANILCA.

B7) MSHA

FINDING: The U.S. Department of Labor, Mine Safety and Health Administration (MSHA) regulates the safety of mining operations. MSHA recently added the requirement that gravel operations that “screen, crush, or size” gravel must provide MSHA training for employees. This requirement affects all road, airport, community, and other infrastructure construction or upgrade projects in Alaska. MSHA also increased the penalties for violations. MSHA did not increase the University of Alaska funds for this training, which will be required in potentially 200 Alaska villages.

THE COMMISSION RECOMMENDS THAT:

B7 The Governor communicate with the U.S. Department of Labor to ensure that appropriate funds are available for the required (unfunded mandate) annual MSHA training held throughout the State of Alaska.

APPENDIX A
ENABLING LEGISLATION

Chapter 98
Session Laws of Alaska, 1986
As Amended by Chapter 12
Session Laws of Alaska, 1998

AN ACT

Relating to the Alaska Minerals Commission; and providing for an effective date.

Section 1. (a) The Legislature finds that the minerals industries, including metallic minerals, industrial minerals, and hydrocarbons, have traditionally and continue to be the major source of wealth and income in the state.

(b) The Legislature further finds that there are major constraints on the continued development of a diverse mineral industry in the state, including the Environmental Protection Agency's effluent guidelines, state water quality standards and improperly classified streams and rivers, restriction on surface access, complex and numerous permitting requirements, and limited access to minerals through mineral closing orders and restrictions on multiple use through state and federal land use plans.

Section 2. ALASKA MINERALS COMMISSION ESTABLISHED. (a) The Alaska Minerals Commission is established in the Department of Commerce and Economic Development.

(b) The Commission is composed of 11 members. The Commission shall be composed of individuals who have at least five years' experience in the various aspects of the minerals industries in the state. The Governor shall appoint five members of the Commission, one of whom must reside in a rural community. The President of the Senate shall appoint three members of the Commission. The Speaker of the House of Representatives shall appoint three members of the Commission. Each member serves at the pleasure of the appointing authority.

(c) The Commission shall make recommendations to the Governor and to the Legislature on ways to mitigate the constraints, including governmental constraints, on development of minerals, including coal, in the State.

(d) The Commission shall report its recommendations each year to the Governor and the Legislature during the first 10 days of the regular session of the Legislature.

Sec. 3. This Act is repealed February 1, 1994.*

Sec. 4. This Act takes effect immediately in accordance with AS 01.10.070(c)

*Note: The Act was amended to extend the life of the Commission to February 1, 2014.

APPENDIX B

ALASKA MINERALS COMMISSION

STATEMENT OF PURPOSE

The Alaska Minerals Commission was created by the 14th Legislature in Chapter 38 of the Session Laws of 1986 and was established to make recommendations to the Governor and to the Legislature on ways to mitigate constraints on the development of minerals in the State.

The minerals industry offers the greatest potential of any Alaska industry for expanding and diversifying the State's economic base; for increasing Statewide employment; and for generating new wealth to create businesses and provide revenues for State and local governments.

However, Alaska has a complex pattern of land ownership and management; has overlapping and uncertain regulatory requirements; has unique geographic, geologic and climatic conditions; and has an undeveloped transportation system.

To attract the capital necessary for the exploration and development of new mines; to ensure that mines can be developed feasibly and in a timely fashion; and to ensure that producing mines remain viable-constraints on the industry must be mitigated.

The Alaska Minerals Commission will prepare reports for the First and Second Sessions of the 15th Legislature and the First Session of the 16th Legislature, recommending to the Governor and to the Legislature the adoption of legislation and the implementation of administrative policy that will best accomplish the statement of policy found in Article VIII, of the Constitution of Alaska:

"It is the policy of the State to encourage the settlement of its land and development of its resources by making them available for maximum use consistent with the public interest."

And the statement of policy found in the President's National Materials and Minerals Report to Congress of April 5, 1982:

"It is the policy of this administration to decrease America's mineral vulnerability by taking positive action that will promote our national security, help ensure a healthy and vigorous economy, create American jobs, and protect America's national resources and environment."

The goals and recommendations of the Alaska Minerals Commission are to assure that the Legislature and the State administration endorse and promote development of a viable mining industry in the State.

APPENDIX C

MINERAL POLICY ACT

Sec. 44.99.110. Declaration of state mineral policy. The Legislature, acting under art. VIII, sec. 1 of the Constitution of the State of Alaska, in an effort to further the economic development of the state, to maintain a sound economy and stable employment, and to encourage responsible economic development within the state for the benefit of present and future generations through the proper conservation and development of the abundant mineral resources within the state, including metals, industrial minerals, and coal, declares as the mineral policy of the state that

- (1) mineral exploration and development be given fair and equitable consideration with other resource use in the multiple use management of state land;
- (2) mineral development be encouraged through reasonable and consistent non-duplicative regulations and administrative stipulations;
- (3) mineral development and the entry into the marketplace of mineral products be considered in developing a statewide transportation infrastructure system;
- (4) mineral development be encouraged through appropriate public information and education, scientific research, technical studies, and the University of Alaska program involvement;
- (5) economic development with respect to the state mineral industry be encouraged with Pacific Rim nations (Sec.1 Ch. 138 SLA 1988).

This publication was released by the Department of Community and Economic Development. Its purpose 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 \$1.00 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.