

Alaska Miners Association

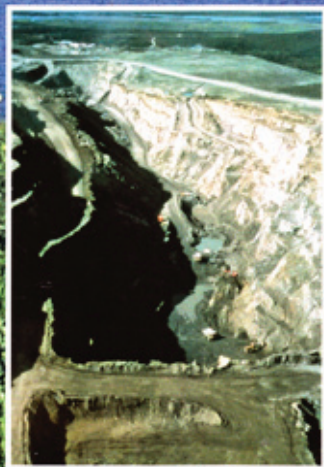


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*Photos: Valdez Creek Mine
during mining (inset)
and after reclamation.*

Feature Article:
*A Social License
to Operate in Alaska*



A SOCIAL LICENSE TO OPERATE IN ALASKA

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1. INTRODUCTION

No matter how compelling the mineralization, no mining exploration company will be granted the permits needed to move into the development phase of a large mine project in Alaska without first having earned their social license to operate by neighboring communities. The good news is that Alaska's long history of successful coexistence by miners, Native villages, the state and federal governments, guided hunters, sport fishers and other users and managers of this vast land suggests that collaborative cohabitation is achievable. The key is recognizing Alaska's uniqueness, listening carefully to area stakeholders and strategically addressing political and legislative initiatives as you navigate your project's pre-permitting, permitting, development and operations timeline. In the end, success is always determined by an ongoing commitment.

The following discussion provides an overview of just some of the many different perspectives that color the Alaska constituent landscape. It is organized into 8 sections. And because water quality issues are so important to so many Alaska stakeholders, we have included a discussion of strategic issues and approaches to mining and water.

2. CHALLENGES AND OPPORTUNITIES IN A COMPLEX ARENA

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2.1 DEFINITIONS

"Social License to Operate" is a fascinating aspect of work in Alaska natural resources. What is it? First, social license is dynamic versus static and it can be characterized by what happens in the nuance. For example, an examination of large mine projects could easily yield two mining projects, both legally permitted and operated, but one that had

social license and the other that didn't. What would we discover if we probed the differences in these projects.

Second, social license is a phrase sometimes more accurately described in the negative. That is, described by what it is NOT, and recognized more easily when it's absent. It's not legally obtaining access to areas of mineral potential but overlooking the access use patterns of neighboring landowners. It's not building Alaska Native relationships while overlooking the role and interest of the local taxing and service authority. It's not providing jobs to proximate villages while compromising other jobs by flying crew change helicopters over wilderness or hunting guides near the project area. It's not permitting a mine with a water quality program that answers every question posed in the statutes and regulations but none of the questions posed by the community. And importantly, it's not presuming your efforts are building trust while missing signals that trust is eroding underneath you.

Social license can be lost by gross level mistakes. Specifically, "Asking the wrong questions and trying to solve the wrong problem." For example, what happens when a mining proponent focuses on the local job opportunities aspects of social license when the pressing question in the project region is escalating power costs and whether the project will exacerbate or relieve these?

Social license can also be lost in the nuance of parties talking past each other. What happens if we only talk about our mining prospect in geologic time when what's relevant in the Alaska Native vernacular is "time immemorial?"

The Alaska venue in particular holds unique attributes that influence the who, how, and why of social license. Whether we are looking at land status and claims settlement, remoteness/logistics, multiple use, subsistence, work force, or politics

– Alaska is different. The Alaska venue provides a myriad of places and arenas in which we can begin to sort it out.

2.2 WHERE DO WE BEGIN?

The backdrop of Alaska is comprised of where you are and how that influences who your known and unknown stakeholders are, and issues affecting particular users. Because the minerals we mine come from the land (even when the land is submerged), a thorough awareness of "where you are" is critical for anyone starting an exploration program. This awareness is more than simply knowing who owns the land. The explorer must also understand who uses the land, when and how they use it, and how exploration activities may impact other users.

At any given point in time on any given piece of land, numerous parties may form the complexion of the "social community" component of social license. Social license clearly involves an increasingly complex stakeholder group. One of those groups is the Alaska Native community and its associated Alaska Native Interests. Many of us will recognize the oversimplification inherent in the phrase: "Alaska Native Interests."

Indeed, the Alaska Native environment is a complex environment: Alaska Native tribes, village and regional native corporations, city and borough residents, Native allotments and allottees, and federal trust relationships to individuals as well as tribes.

2.3 OPPORTUNITIES AND CHALLENGES

The complexities and nuance of the Alaska venue are ripe with both opportunities and challenges. Attention to access, subsistence, commercial fishing and recreation are clearly part of the mix of obtaining social license. Additionally a regulatory framework that addresses some issues may or may not achieve the elements of social license. In Alaska, regulatory agencies must be mindful of potential litigation when reviewing and approving permits for new mines. We see political and legislative initiatives increasing, each a potential influence on social license.

We operate in a complex and uniquely Alaskan venue where we are tasked with understanding that venue and the stakeholders involved, their respective issues and the synergistic opportunities for complications as well as solutions.

Obtaining and maintaining a social license to operate is complex and dynamic. It's not simple; it's not acquired without work, and it's not maintained without diligent effort based on a foundation of trust put in place piece by piece over time. Presuming you've covered all your bases may be a pitfall and is probably best used as an indicator that it's time to check on whether additional bases have emerged and/or whether some of them previously covered have moved.

3. ALASKA: WHAT IS DIFFERENT HERE?

*John Shively, at the time of this writing
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Relations for Holland America Line,
now CEO of Pebble Partnership*

3.1 LAND OWNERSHIP

A key to achieving social license in Alaska is understanding the major land ownership patterns that have evolved here since statehood. Alaska has about 365 million acres and ultimately the ownership patterns will be roughly as follows:

- Native Corporations : 44 million acres
- The State of Alaska: 104 million acres
- Private Landowners: somewhat less than 2 million acres
- The Federal Government: the remainder, about 215 million acres.

However, it is important to understand that 140 million acres of the federal land is in Conservation System Units (CSUs) of which 58 million are designated wilderness. For all practicable purposes this acreage is off limits to development.

In addition, doing business with each of the three major land owners in Alaska must be considered in the context of the remoteness of much of the state and the issues relating to access across the various land ownership patterns.

Most opportunities for the development of new mines will be in rural areas of Alaska and in much of Alaska, the term “rural” has a very different meaning than anywhere else in the United States. For instance, there are:

- No (or very few) roads;
- Very limited employment opportunities for local residents;
- A very high cost of living, particularly when it comes to the cost of energy; and
- The cost of development tends to be very high.

3.2 RURAL ALASKA

In this piece I want to emphasize the issues surrounding social license as they relate to the rural areas of Alaska for a couple of reasons. The first is because rural Alaska is where I have the most experience. In addition, as I stated above, that is where most, if not all, new mines will be developed

What is a “social license”? It is not a piece of paper, but it probably is at least as important as any permit a company may obtain. It does not have its own public process, but it will influence the outcome of any public process needed to permit a new mine. It does involve personal and community values. In essence it involves garnering local support for projects and in the 21st century getting a social license is just as important as assuring that the engineering is correct for the development of the project and the government issued permits are all in order.

The following are some the issues you will need to address to obtain a social license in rural Alaska:

- **Subsistence hunting and fishing** — If the local residents think that their subsistence resources will be threatened, it is quite unlikely that a social license will be granted.
- **The recruitment, training and hiring of local people** — This situation requires an intense effort and strategy because in many cases local workers will need to be trained while they learn their jobs. Also, mine developers will need to be aware of

some of the cultural differences between Native Alaskans and westerners.

- **The use of local businesses and Native corporations as contractors** — Gone are the days when most all of the economic benefits could leave the area in which the mine is located. Using the existing capabilities of local Native organizations and/or working with them to develop new capacity is essential to success in rural Alaska. It will also help with the local hire issue.
- **The use of traditional knowledge** — People who live off the land hold valuable information about the resources of the area, or what we westerners like to call baseline data. This information must be part of the data gathering process.
- **The need for a tax base** — Most of rural Alaska has no tax base and any new mine must contribute to helping the local government meet its needs.
- **You will need to work with local entities** — These include local cities and/or boroughs, tribal governments, and Regional and Village Native Corporations. As frustrating as it may seem to some, these organizations do not always agree, but they definitely need to be listened to.

3.3 GUIDING CONCEPTS

The work to get a social license goes on before and during the more formal permitting process. Unlike the formal process, there is no “road map,” and unfortunately the rules are subject to change. But there are some guiding concepts that may be useful.

- A social license is about people, so it takes time, extensive effort and patience to achieve one.
- The company must listen conscientiously to local concerns. Understand not only what people are trying to say, but why they might be saying it. Some times if you can change the “why” it becomes much easier to change the “what.”
- It may not be possible to meet every demand for a social license particularly when there are conflicting demands. It is important to explain to people at some point why their requests cannot be met.

However, such denials should come later rather than earlier in the process, after both sides have had an opportunity to try to understand each other.

- Local people must see the benefits of any development or no social license will be granted.
- Some of those opposed to the development of mines and other types of resources are becoming more adept at using the social license to stop projects. I suspect this may be because they know that technical and environmental issues can be resolved using today’s technology and the strenuous permitting process any new mine has to go through.

How will you know if you have your social license? A company may never know for sure, but the less the local commotion, the more likely the company has it. The one thing I do know is that, if there is no social license, it is quite likely that any new development will not be able to go forward.

4. KNOWING WHERE YOU ARE

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4.1 THE ALASKA MAP

A thorough awareness of “where you are” is critical for anyone starting an exploration program. This awareness is more than simply knowing who owns the land. The explorer must also understand who uses the land, when and how they use it, and how their exploration activities may impact other users. They must also know who their neighbors are, and how they can best minimize their impacts on other users.

Alaska is a big mapping target. With a total width of 3,000 miles, a 45,000 mile coastline, and an area of 375 million acres, finding your way around can get complicated. The explorer must first understand the land ownership of the region they will

be working in—not just the land they will be exploring, but also the neighboring lands, and any lands used for access. The US government owns most of Alaska with about 63%. The State comes in second at about 24%, and the Native corporations own about 12%. If you do the math, you will see that the remaining private portion is very small. Also, it is important to note that Alaska’s land ownership pattern is still evolving as the Federal government continues processing both State and Native land claims. Land status maps must be kept current.

4.2 LAND PLANNING INFORMATION SOURCES

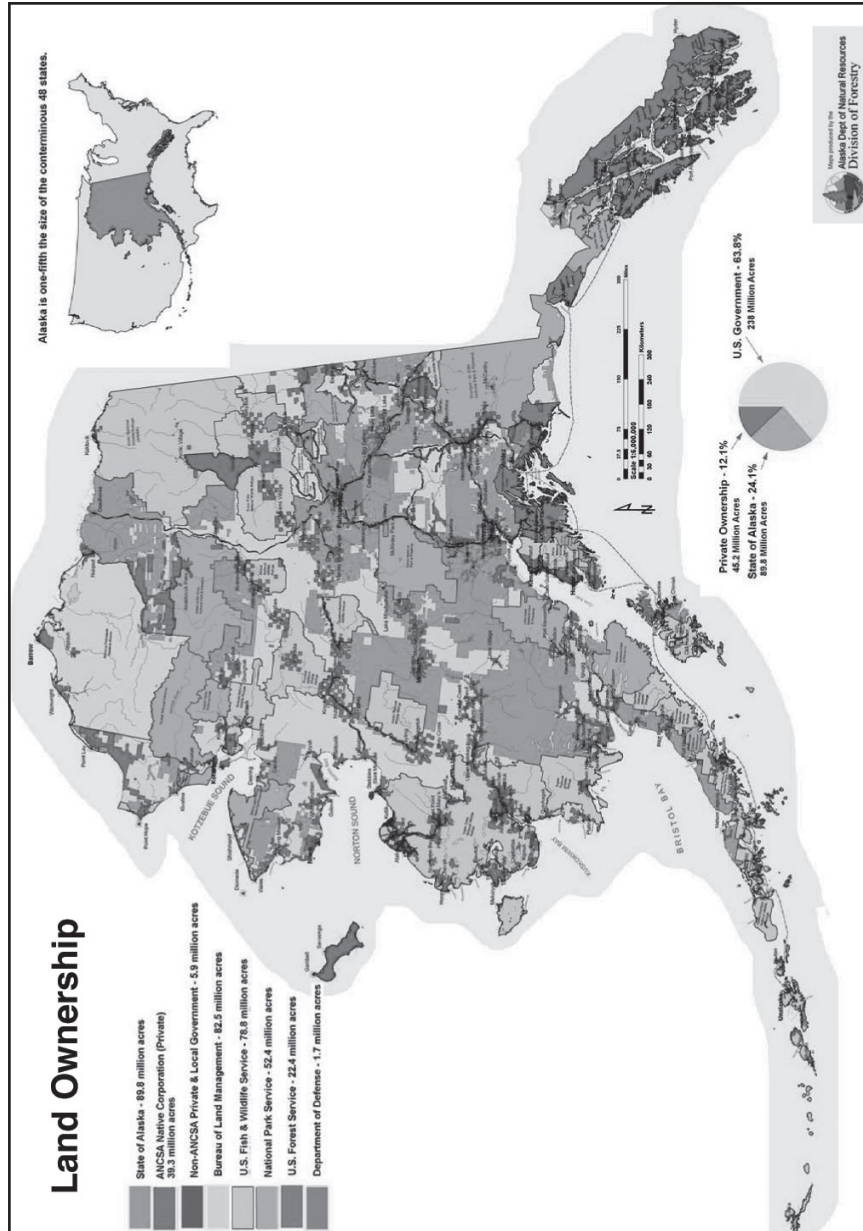
Land status information can be obtained from many sources, but here are three good ones to start with. First, the Alaska Department of Natural Resources (DNR) maintains state land records, and has public information centers in Anchorage, Fairbanks, and Juneau. The Department also has its information available on the web (www.dnr.state.ak.us). Second, the US Bureau of Land Management (BLM) maintains Federal land records, and provides information on its web site at www.blm.gov/ak/st/en.html. Third, local governments and municipalities typically maintain more detailed land records for their jurisdictions.

DNR and BLM can not only provide accurate land status information, but they will be a valuable source of information to start learning about who uses the land. A good way to start learning about the area you are exploring is to read the various land use plans that may be in place for your area. DNR has developed its “Area Plans” for most of the state, and these provide much information on the resources of the area, and the important uses of the land. BLM has similar plans that cover most of the state as well. Even though these plans provide management direction only to lands under each agency’s jurisdictions, they commonly provide valuable information for the

entire region. The DNR and BLM websites mentioned above will provide information on these plans.

In addition to DNR and BLM's plans, local governments and coastal districts have also developed land use and resource plans for their areas. These plans are more focused on smaller

areas, and are very valuable for identifying areas which are important for local residents. You will have to research each local government for its plans (start with the Division of Community and Regional Affairs at www.commerce.state.ak.us/dca), and the coastal district plans are available on DNR's website



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Next, it is critical to understand the Native interests in your area. The regional Native Corporations and their non-profit arms are a good way to begin gathering this information. The DNR and BLM land use plans are a good way to see in which Native Corporation's region you will be operating in. The Native people of Alaska have been doing business here for many thousands of years, and are truly the experts on the land.

An exciting new development in statewide mapping is the Statewide Digital Mapping Initiative. This is a joint effort between DNR, the Alaska Department of Military and Veterans Affairs, and the University of Alaska, to develop a seamless digital topographic base map of the state. The effort is still in its early stages, but their website already has some very good satellite imagery of the state (www.alaskamapped.org). Explorers will find this to be a valuable resource in finding your way around Alaska.

4.3 IDENTIFYING LAND USERS

Once the explorer has the big picture of what the land ownership and the resource values are in their area, they must narrow their focus on specific uses. Who are the subsistence users of the area, and what are the subsistence resources that they use? Who are the other public users of the area? Are there commercial recreation, hunting, fishing users of the area? And just remember, no matter how thoroughly you do your homework, there will always be one other interest you missed. So always be on the lookout for this interest as you conduct your program, and be prepared to outreach quickly.

The mining industry is coming under increasing scrutiny by the public, and must strive to continually improve the way it addresses impacts to the land and its users. And this increased awareness and care must begin at the exploration phase. No longer are projects "off the radar" until development permits are applied for. The

explorer must set a strong foundation early on that will enable successful permitting of a future project.

5. THE PERSPECTIVE OF A HUNTING GUIDE

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5.1 THE WILD PLACE

Alaska derives its name from an Aleut word meaning where the sea breaks its back or, as many refer to it, The Great Land. It is a place like no other. A place so spellbinding in greatness that once you have tasted of her fruit, your entire person will never be the same; a place to which comparisons will always be made, but which will rarely be matched. Alaska is 1400 miles tall by 2200 miles wide. Surround eighty percent of this land mass with two oceans and two seas, eighteen hundred islands and fifty thousand miles of salt water shoreline. Install over three million lakes, over three thousand rivers, countless streams, thirty-nine mountain ranges and five thousand glaciers. Include in this picture eighty active volcanoes, one hundred thirty million acres of forest and seemingly endless millions of acres of rolling tundra covered mountains, hills, plains and Arctic desert. Add to this fourteen species of big game, over four hundred species of birds, nineteen species of furbearers, twenty species of sport fish and at least twenty species of marine mammals. A virtual sub continent in itself, the vast habitats of this great land offer sportsmen what many feel are the greatest hunting and sport fishing opportunities in the world.

This is the image that prevails, the world over, of Alaska, not the great mineral, timber oil and gas resources that are often times world class by their own merits, but of our great wild places and wild things.

5.2 THE GUIDED HUNT INDUSTRY

The guided hunt industry shares a very close kindred history with mineral exploration and development in Alaska. No

matter where you find reference to early prospecting and mining activity in Alaska, you can also find historic guided sport hunting references.

Approximately seventy five percent of Alaska's guided hunting industry occurs on lands that are also open to mineral entry. 88% of the land in Alaska is public land. The mining and guided hunting industries share many tempests of change and political challenges. As Alaska has grown and the multiple use concept of our resource management programs has been exploited, now we often find ourselves in conflict with other user groups and activities.

The professional guide industry is affected by quality of experience factors generated by industry, wildlife and wildland stewardship. We rely on the multiple users of Alaska's land to respectfully seek the social license to do business in Alaska.

The guided hunter in today's Alaska is often paying one to two thousand dollars a day for a "Quality Hunting Experience". The professional guide, most often operating on a client base of under twenty clients per year, is dependant not only on his ability as a guide and a steward, but also on his clientele base as reference to his offerings and performance.

5.3 WORKING TOGETHER

It is my opinion that future development and FUTURE sustainability of Alaska's mineral, hunting and sport fishing industries will be successful only by working together to better understand each others' dependencies. Most importantly, we must learn to care for and to respect each other. These are big words in today's world of conflict.

We are each dependant upon our public trust resources, minerals, land, water, fish or wildlife, whether renewable or finite, and the governmental stewardship of access, conservation and allocation factors. With good leadership and a caring, collaborative atmosphere, we can prevail.

5.4 EXAMPLES: GOOD AND BAD

My family and I have operated a guided hunting program from the same location for

many years where we specialize in 20-to-30 day seven species hunts. As fate would have it, mineral exploration targets are located in this same region. One year, former AMA President Tom Bundtzen contacted us and asked if we could work together to help support an exploration effort in this area. He realized, as we did, that if we were to work together, we would minimize conflict and the footprint of impact on the land and resources.

Tom explained to his crew, on the first day of their exploration program in front of my family and I, that we had a substantial history in the area and that they were to work directly with us to minimize their impact on the land and wildlife resources. What a blessing this was.

We were able to establish the timing of reconnaissance work to minimize displacement of wildlife before the hunting season arrived. We were able to work together to establish flyways that least impacted the wildlife populations that we are dependant on. In summary, it worked out very well for all concerned and, we had a successful fall hunting season.

On the other side of the coin, in this same region we have had helicopter claim-staking and airborne geophysical surveyors show up in the middle of September, right during the peak of our hunting season and very negatively and seriously impact our operation. This sent hunters home making negative statements about their experience with us and the way Alaska manages its industries.

When all of our other communication efforts on the ground failed to obtain a response from the helicopter crew, we fired a flare in their vicinity. This resulted in a swift landing — but we were surprised to hear from the Fairbanks resident in charge of the staking program that he did not know that the hunting season was open.

Then, a few years ago I contacted a company that I learned was going to possibly be operating in the area and was told by the owners that "we are going to be there, we are going to build a mine there whether you are there or not" and "we do not care if our program is going to impact you".

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Alaska is unique, it is also her nature to produce unique individuals. In each remote village, town and region there are individuals who have the stalwartness and aptitude of a mature polar bear. I have always tried to raise my sons and teach our assistant guides that it is not wise to poke a sleeping bear.

Let me give you a theoretical but potentially very real example. Imagine an exploration manager who is overseeing a local project visiting with some local residents while at the air terminal in the village closest to his operation. The caribou in this region provide a lot of the needed food and resources for the local people and for the guides in the area. While the exploration manager is visiting, a small elderly man mentions to him that he should be careful with the flight pattern he is using to access his project from his camp as it could impact the way the caribou move in the fall when hunting occurs. The exploration manager thinks about all of the years he has been flying over caribou and how the flying never seems to affect them and disregards the comment.

That fall the caribou do not come to the river crossing where the local people have harvested for many years but, rather, turn and head in a different direction entirely. Now the people have to use much more gas at 5-to-10 dollars a gallon to go further and harvest less. Whether you realize it or not, you just poked the sleeping bear.

5.5 RECOMMENDATIONS

Do your homework. I recommend that you take the time to develop a series of contract service personnel policies before heading into the field. Specifically, 1) find and contact other types of service providers who operate in the area and see if there are ways to work together that would benefit the whole; 2) learn about the social atmosphere of the area, the people, their culture, their way of life, the local fish and wildlife and the important ecological and conservation aspects of the area; 3) then work together to build your program in a manner that

shows that you really do care about Alaska and these important factors.

The Alaska Professional Hunters Association has for many years been petitioning Alaska's Department of Natural Resources (DNR) to work with us to establish a guide lease area system that restricts the number of guides that can operate in a certain geographical area.

I am pleased to tell you that current DNR Commissioner Irwin is allowing for this development, but, it has posed some serious questions. How does the government decide which guide(s) should have the ability to operate in a certain area? We have encouraged the development of a competitive program that requires interested parties to submit a prospectus defining their operations and impacts on the land and resources. Then how do we know who will be the best service provider?

The answer is not hard. It has to do with the applicants' stewardship abilities and regulatory knowledge, but even more importantly, with his or her knowledge of the social, cultural and ecological characteristics of the region and how their proposed program will work within the parameters of these concerns. In order to earn the social license to do business in Alaska, and to provide for future generations of miners and guided hunters, we need to be good stewards and respect each others way of life.

6. AN ALASKA NATIVE PERSPECTIVE

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6.1 PREMISES

We are an environment rich in resource potential. We have a history where resources have and continue to be mined. Most large mine developments today are dependent on outside technical and financial resources. We continue to operate within an increasingly complex stakeholder group. One of those groups is the Alaska Native community.

6.2 Seeking Balance

As an Alaska Native, I am challenged with the on-going responsibility of finding balance between the values of our Native culture and the need for Western economic opportunities necessary to sustain rural Alaskans. I bring this perspective to the topic of mineral exploration and development in Alaska. I participated in the NANA experience in the development of the Red Dog mine near Kotzebue. I've also been involved in the on-going discussion in the Calista region regarding the Donlin Creek prospect.

Today rural Alaskans live in an environment that has been built on a blend of the western cash economy and the natural resource economy our grandparents depended on. We maintain strong ties to our Native cultures and exercise the values important to sustaining our cultural identities as Inupiaq, Yupik and Athabaskan people. The natural renewable resources of the land and marine environments are critical components to the well-being of our Native cultures. At the same time, to sustain this quality of life, rural Alaskans need jobs and economic opportunities.

"A Social License To Operate," is a fitting focus given the world wide demand for energy and mineral resources and the extent of exploration activity in Alaska right now. I can't educate you in one paper about all you need to know and understand about the Alaska Native perspective on resource development. It's too complex. If there is one thing I hope you can take away from this discussion, it would be an understanding and appreciation of the need to take the time to meet and begin to understand the Alaska Native people in your area of operation. You don't **pay** for your social license to operate, you build the relationship, gain the trust and **earn** your social license to operate. Without it, you're probably not going to get the permits you need to move from exploration to development.

6.3 NATIVE ORGANIZATIONAL STRUCTURES IN ALASKA

The Alaska Native environment is a complex environment. It is comprised of tribal, government and corporate entities. I'm a tribal member of the Noorvik Native Community, I'm a shareholder of NANA Regional Corporation, I'm a city resident, I'm a borough resident, and I'm a ward of the Bureau of Indian Affairs.

There are 229 federally recognized tribal governments in Alaska. Prior to federal recognition, these tribal governments have long been the local governments in rural communities. Many communities today have chosen not to create a city government established under State charter. Tribes fall under the federal-tribal trust relationship with the U.S. Dept. of the Interior Bureau of Indian Affairs. In addition, the EPA and HUD have developed funding programs specifically for tribes. One of those programs, EPA's Indian General Assistance program has in the last few years strengthened the ability of tribes to engage in discussions, studies, and permitting processes of large resource developments projects in Alaska.

The Alaska Native Claims Settlement Act (ANCSA) was based on the fact that these tribes were the governing bodies of Alaska Native people and their lands. The Alaska settlement did not follow the model of the other 48 states where American Indians have been relegated to reservation systems. Here 13 state chartered regional corporations and 229 village corporations were formed to accept the land and cash settlement.

A charge to the Native corporations under ANCSA is to promote the economic and social well-being of its shareholders. Over the years, every regional corporation has engaged in resource development, whether in timber, gravel, minerals, or oil. That development was for economic value.

There are 12 regional for-profit corporations in Alaska, the 13th regional corporation is based outside Alaska. There are also roughly 20 regional Native non-profit corporations in Alaska providing health, tribal and social service programs for Alaska Natives. Under ANCSA village and

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regional corporations will gain fee simple title to 44 million acres of land, roughly 10% of Alaska. The regional corporations hold sub surface rights to all 44 million acres of land. The regional corporations have made land selections in two important categories: 1) lands rich in renewable resources to support subsistence activities, and 2) lands with potential for resource development.

6.4 DECISIONMAKING IN THIS COMPLEX ENVIRONMENT

Those of you that have come to know and understand us can appreciate that Alaska Natives have genuine respect for, dependence on and continued commitment to protecting our land and marine environments. Those are the core values that influence our decision making process. By protecting our language, culture, and access to natural renewable resources, we protect our on-going identity as Alaska Native people.

But like you, we have a growing need for economic opportunities and resources to sustain our shareholders and communities. How do we maintain protection of renewable resources that are important to the Alaska Native people yet promote the responsible development of non-renewable resources for economic development?

The challenge is not simple and it is not small. We see the increasingly contentious confrontations that both exploration and development projects are experiencing today. We have a complex operating environment, but we also have an increasingly complex stakeholder group. I don't see a single strategy that could be applied state-wide to adequately address this growing complexity. Most Native people call attention to legitimate issues of concern when addressing risks to the land and marine environments and renewable resources. Others have opened the doors to outside environmental interests who come in with an agenda that is focused on stopping all resource development. What is the value of Native corporation land selections that

hold oil, gas or mineral resources if those lands can't be developed?

The answer lies in building protections into each resource development project from the beginning. You start by building a relationship that allows both sides to gain an understanding of each other and of the proposed project. You nurture the relationship by being honest and open to achieve the trust that it will take to get you through the next level. You incorporate the values of each stakeholder into the project description. Finally, you operate and maintain the trust you have earned throughout the course of the entire project.

6.5 CASE STUDY

Developing Red Dog was not an easy decision for the NANA leadership and shareholders, but it was the right decision. While the prospect had to be economic first, we also developed provisions to 1) address training and job opportunities for NANA shareholders, and 2) protect subsistence resources in the area.

Today, following 18 years of production, the majority of the Red Dog workforce is comprised of NANA shareholders. In all areas of operation, exempt and non-exempt, our shareholders fill critical roles in Red Dog production. Throughout the project, a training and development program exists to move employees from the entry level to senior level positions in each department. The shareholder and employment committee comprised of Teck and NANA employees is an active part of the operation.

The Subsistence Committee is comprised of village residents from Kivalina and Noatak. The role of the subsistence committee is to monitor and advise Red Dog management regarding the effects on subsistence resources, identifying problems and assisting in resolving those potential problems.

The residents and communities of the region enjoy local private sector job opportunities. The economy of our region in relation to other rural regions is much

stronger. Our communities have realized and benefited from earnings in human resource capital. Red Dog royalties provide college and vocational student scholarships for shareholders. The Northwest Arctic Borough gained bonding capability to build new schools in 90% of the villages so that our children enjoy modern academic facilities. Red Dog has benefited the NANA region and NANA shareholders. Have we realized all of our expectations? No, but we've realized many benefits that we would not have otherwise.

6.6 CONCLUSIONS

Over the last few years I've had the opportunity to engage in the Calista region discussions regarding the Donlin Creek prospect. In travels throughout the Yukon Kuskokwim region and attending tribal conventions, we were able to bring Calista's partners, Barrick/NovaGold, into contact on the ground with local residents to gain a better understanding of the values and concerns that they have regarding the potential development of Donlin Creek. Our people in the NANA region had much of the same discussions and concerns when considering Red Dog development.

To achieve success, it is critical that potential developers understand and appreciate the values and thought processes of the Alaska Native on the subject of resource development. Even more important is the need to establish relationships with Alaska Natives in your area of operation, to learn from them and to incorporate their knowledge and values into your project.

7. LESSONS FROM THE IMPLEMENTATION OF ANGLO AMERICAN'S SOCIO-ECONOMIC ASSESSMENT TOOLBOX

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7.1 COPING WITH INCREASING STAKEHOLDER EXPECTATIONS

Mining companies today are facing greater pressures from stakeholders, be they communities, governments, pressure groups or the media, than ever before. Indeed, it has become something of a cliché to say that communities are becoming ever more assertive and demanding. However, unlike earlier waves of environmental protests in the 1980s and 1990s, today's campaigns seem to be based more on rising expectations than reactions to any well-publicized conflicts involving the sector. Moreover, today's leading mining firms are widely recognized as being among the global leaders in addressing sustainable development and broader corporate responsibility issues, winning countless awards for innovative and proactive initiatives which benefit host communities and the environment.

Many recent allegations against mining companies turn out, on closer inspection, to be far from clear cut, and can often be traced to under-developed policy and regulatory regimes rather than poor corporate behavior. For example, on-going research on the "resource curse" theory – which suggests that some natural resource dependent countries have developed more slowly than their non-resource endowed peers – is identifying a host of opportunities to improve governance and mineral sector policies that can ensure better socio-economic development outcomes. Importantly, the research has identified collaborative measures that government and industry can implement together.¹ For example, companies are increasingly interested in helping to transfer successful policies, such as Alaska's investment of oil revenues in its Permanent Fund, to developing countries faced with rapid growth in natural resource revenues.

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So why are stakeholders expecting ever higher standards from companies, and in particular on the subject of social and economic contributions? The question seems particularly puzzling after a prolonged period of robust, private sector-led growth in the world economy which has lifted hundreds of millions out of poverty. One factor is better communications, leading to a rapid sharing across the globe of the ever higher expectations that this robust growth has brought in its train. The insecurities felt by many in today's more open global economy are doubtless another. Finally, the financial and dotcom scandals in the early part of this decade, and product quality concerns relating to everything from toys to pet food, have undoubtedly affected the reputation of all businesses and led to demands for increased transparency and accountability.

In the rich world, these rising expectations have manifested themselves in demands for higher quality public services, such as health, and for better and safer products. In developing countries, global commitments to initiatives like the Millennium Development Goals,² have also raised hopes for better lives for millions of the world's poorest.

Regardless of the causes, however, it is clear that companies are having to respond as never before. Government efforts show that supporting socio-economic development is not easy – witness the billions of dollars in aid poured into Africa each year with little evidence of living standards there catching up with those in developed countries. So what can a mine manager, with a safe mine to run and budgets to meet, do to address the needs of local communities?

7.2 ANGLO AMERICAN: SUPPORTING HOST COMMUNITIES

Anglo American's experience around the world demonstrates that it is in fact possible to make lasting, positive contributions to host communities, but that doing so requires careful planning and consultation – it isn't simply a question of wanting to do the right thing.

In an attempt to capture Anglo's experience in supporting the development of host communities, we have developed a unique Socio-Economic Assessment Toolbox (SEAT). SEAT builds upon decades of Anglo support for local communities – from the construction of the first teacher training college for black students in Soweto in 1970s apartheid South Africa, to highly successful enterprise development programs in South Africa and Chile, both of which won prestigious awards in 2007.

First launched in 2002, SEAT sets out a comprehensive process for managing the socio-economic impacts of mining operations, based around seven key steps, shown in Figure 1 (on next page).

SEAT follows the established structure of good-practice impact assessment and management plan processes. However, SEAT is unique in several ways:

- *We use SEAT at mature operations and it supplements rather than replaces the permitting process.* While, like any other mining company, our new projects must go through rigorous internal and public approval procedures, SEAT is deployed at operating mines.
- *We undertake SEAT assessments every three years.* This enables us to constantly evaluate community priorities – because we recognize these evolve over time – and ensure the action plans drawn up to address these are progressing.
- *SEAT is not a regulatory requirement, and is not designed to support permit applications.* SEAT takes Anglo's management of social issues well beyond compliance.
- *Community participation is an integral part of SEAT assessments.* SEAT is designed to be undertaken with host communities, and is not something that "happens to them" – too often the case with many traditional impact assessment and permitting processes. For example, in Chile and Namibia, all of the SEAT assessments were undertaken on behalf of Anglo by respected, independent local NGOs with strong links to local communities.

Step 1 – Profile the Anglo American operation

Step 2 – Profile and engage with the community

Step 3 – Identify and assess social and economic impacts of the Anglo operation and key local development issues, and assess existing management measures and social investments

Step 4 – Improve the management of socio-economic impacts and issues during operation and closure

Step 5 – Support community development

Step 6 – Develop a management and monitoring plan

Step 7 – Prepare socio-economic report, feed back to community and assess SEAT process

Figure 1 The Seven Steps of the Anglo SEAT Process

A particular strength of SEAT is that extensive guidance is provided, in simple, jargon-free language, on how to support community development initiatives. While there are many text books available on how to undertake impact assessments, there is surprisingly little “how to” guidance on how companies can support host communities. Unable to find suitable guidance, we developed our own.

7.3 OUTCOMES FROM SEAT ASSESSMENTS

In keeping with the stakeholder driven approach of SEAT, assessments at site level have led to a range of initiatives.

For example, in Chile a common need for local business development around our mines was identified. This led to the “Anglo Emerge” program, which will provide micro-credit loans to 10,000 entrepreneurs by 2010, and more detailed assistance to 200 medium-sized businesses through supply chain opportunities. Meanwhile, in Australia, SEAT assessments have led to capacity building initiatives with local aboriginal communities that have included youth development activities and small business advice.

Both these initiatives have received prestigious awards in 2007 – in Chile we were awarded one of only seven Presidential Seals to celebrate the country’s 200th anniversary of independence, while our work in Australia led to Anglo winning the Queensland State Government’s Multicultural Award for Large Businesses.

Anglo’s SEAT Process — Lessons Learned

To date, SEAT has been implemented at about 60 Anglo operations in more than 15 countries. So what have we learned?

Firstly, we have found that those “rising stakeholder demands” are in fact generally dominated by pragmatic, day to day concerns that responsible companies can help to address, in partnership with host communities. The list below summarizes the most common issues raised by stakeholders. They mostly reflect understandable desires for economic opportunities, in the form of jobs and procurement contracts for example.

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Communities around an Anglo operation in Chile discuss local development issues with company staff.

Stakeholder Priorities — the Most Common Issues Arising in SEAT Studies:

- Access to jobs and training
- Access to land and alternative livelihoods
- Access to supply chain opportunities
- Balance/distribution of social investments
- Rivalries between stakeholder groups
- Questions about environmental impacts
- Health and public services
- Transport issues
- Communication and transparency

Questions about environmental impacts have also often arisen. These have mostly been about local nuisance factors – for example can dust suppression be improved, or could blasting times be changed so as not to interrupt the daily routines of children? But SEAT studies have sometimes identified incorrect perceptions – perhaps the most striking of which was harmless steam plumes being mistaken for toxic air emissions at one site. This misconception had lain unaddressed for many years, and was an unrecognized source of tension between the company and the community.

Like governments before us, we have also learned that supporting local communities is far from easy, which led to an improved version of the manual being released in 2007. SEAT Version 2, as it is known, provides much more guidance on how to work with communities on local development challenges. The new “community development” tools, as they are called, are illustrated in Figure 2 (on next page).

Finally, we have learned to listen to local people and to look to host communities for answers to their problems. In Alaska, for example, we are particularly keen to learn more about the successful partnership between the Red Dog mine and Native Alaskans.

7.4 INDEPENDENT EVALUATION OF SEAT

An independent evaluation of SEAT, undertaken by leading US NGO Business for Social Responsibility (BSR), found that SEAT was “an international best practice”, but also highlighted opportunities for improved delivery of SEAT studies at site level. Most important of these is the value of senior

Tool 5A — Establishing Partnerships
Tool 5B — Leveraging Donor Resources
Tool 5C — Micro-Credit for SME Development
Tool 5D — Increasing Local Procurement for Local Business Development
Tool 5E — Alternative Livelihoods
Tool 5F — Human Capital Development
Tool 5G — Seeking Community Synergies from Infrastructure Development
Tool 5H — Small Scale Water and Sanitation Service Delivery
Tool 5I — Sustainable Energy Delivery
Tool 5J — Improving Community Health
Tool 5K — Developing Local Institutional Capacities

Figure 2 The SEAT Community Development Tools

leadership in a SEAT assessment, which is critical for ensuring adequate resources and prioritization, and for integrating findings from SEAT reports into site management plans. BSR also recommended a closer focus on planning for the socio-economic dimension of mine closure, and on setting clearer targets for proposed management measures.

Most importantly, interviews undertaken by BSR with over 80 stakeholders around the world found that 80 percent believed that the SEAT process had built trust between Anglo and local communities, while none felt that trust was diminished. The following are some quotes from the BSR interviews.³

Quotes from BSR's Interviews with External Stakeholders:

- "There is more trust because there is more contact."
- "Anglo is very involved in the community."
- "Anglo isn't the only company in the region, but it's the only one with a process for reaching out to the community."
- "Anglo [keeps] the commitments that it makes."

- "So far the community has taken this well. They feel that finally Anglo has taken an interest in their basic needs and are very happy."
- "We have come to see the company in a different light."
- "They are light years ahead of other companies."
- "Anglo's priorities align with the municipality's priorities."
- "Haven't seen anything as structured, specific and targeted as SEAT."

BSR's final recommendation was that Anglo should make the basic version of SEAT available to the general public as a contribution to enhancing sustainable development in the extractive industries. Anglo CEO Cynthia Carroll announced our intention to do this during her opening address at the BSR conference in San Francisco in October 2007, and the manual is now available on Anglo American's website for download.⁴

7.5 WHERE NEXT FOR SEAT?

We aim to continually enhance SEAT in response to emerging stakeholder expectations and the changing nature of our business. In 2008, for example, we will be adding new

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guidance on how to interact respectfully with indigenous peoples, and on how to manage the social impacts of contractors – often an area where mining companies have struggled to ensure that in-house standards are observed.

The philosophy behind SEAT is closely aligned with the five core principles of the Pebble Partnership (listed below). So, although Pebble is still at the exploration stage and is some way from being an operating mine, we also expect to be drawing upon SEAT to inform consultation and community development activities, and Pebble staff have already participated enthusiastically at SEAT training workshops.

The Pebble Partnership's Five Principles

- Pebble must benefit people — Pebble is for all Alaskans
- Pebble must co-exist with healthy fish, wildlife and other valued natural resources
- Pebble must apply the world's best and most advanced science
- Pebble must help build sustainable communities
- At Pebble, we must listen before we act

2008 will also see the first of the second round of SEAT studies, which will be undertaken using the new version of the toolbox. We anticipate that these second-round reports will provide a strong platform for both enhanced community relations, and stronger, more sustainable community development initiatives.

Footnotes

¹ For more information see the International Council on Mining and Metals' Resource Endowment Initiative, a multi-stakeholder research initiative to identify the enabling factors for successful resource development. The project has produced a number of research reports that have been peer-reviewed by NGOs, eminent academics and government officials in many mining countries. http://www.icmm.com/com_soc_develop.php

² The Millennium Development Goals (MDGs) are a set of development objectives agreed by the United Nations and national governments in 2000 that aim to eradicate extreme poverty in the world by 2015. The MDGs include targets for issues such as access to education, water and sanitation and health care and gender equality.

³ BSR undertook the evaluation of SEAT on the condition that a report be made publicly available, consistent with their mission to spread best practice in the corporate responsibility field. Anglo was happy to agree to this, and the BSR report can be found at: www.bsr.org/reports/SEAT_Public_Evaluation.pdf

⁴ www.angloamerican.co.uk. The SEAT manual can be found under the "Global Citizenship" tab.

8. MINING AND WATER: STRATEGIC ISSUES AND APPROACHES

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8.1 INTRODUCTION

Mining is fundamental to Alaska's economy and way of life. However, the economic, social, and political environment is changing. Success stories are not well publicized, and public perception includes contamination, tailings piles, and damaged landscapes. Subsistence, commercial fishing, and recreation impacts are of concern, as are cumulative impacts. Regulatory agencies consider potential litigation when reviewing permits for new mines. Political and legislative initiatives must be strategically addressed. Most of these considerations focus on impacts to water.

8.2 WATER USE IN MINING

Adequate water supply is critical to mining operations. Water is used to extract mineral resources, process or concentrate ore, transport mineral product, stabilize tailings to prevent acid rock drainage, and

discharge pollutants. Water is also used for dust control, potable water, and sewage treatment.

Water use varies widely with the type and grade of ore being mined. Use at individual large mines in Alaska ranges from about 2 to 14 Mgal. However, 70% to 100% of this amount is recycled water, a fact poorly understood by the general public (USEPA 2003, Greens Creek Mining Co. 2004, Kinross Gold Co. 2007, SRK 2007, Teck Cominco 2007b).

Water sources include surface water, groundwater, seawater, and recycled water. Water supply in Alaska can be problematic due to permafrost, limited aquifer size, and lack of distribution systems (ADNR 2000).

Water rights provide legal use of surface or groundwater under the Alaska Water Act. Approved water rights provide legal standing against conflicting uses, and priority over applications for use of the same water. However, premature application for water rights creates controversy, and use of preliminary design information may lead to an inaccurate portrayal of mining development and burden the regulatory process.

Water quality and discharge concerns include acid rock drainage (ARD), metal leaching from exposed mineral deposits and stockpiles, and seepage/discharge from tailings facilities. Maintaining instream flow for downstream users is a related concern. If not properly managed, injury or mortality

to fish and wildlife, human health impacts, and economic impacts to industries dependent on clean water and uncontaminated products can result.

Water stakeholders include the mining industry; state, federal, and municipal government; Alaska Natives; the commercial fishing industry; tourism operations and recreational users; and non-governmental organizations. Industry must recognize and address their concerns. As debate over mining grows, elected officials, decision makers, and the general public must also be engaged.

The current **regulatory, political, and legal environment** is unlike anything seen in the past. Water use and discharge is governed by federal, state, and municipal regulations, including the federal Clean Water Act, several Alaska State Statutes, and local land management regulations. The State's large mine permitting process is a primary vehicle for mine review and approval.

Six State legislative bills have been introduced addressing mining and water issues, focused on the Pebble Project. Recent litigation such as the 9th Circuit Court of Appeals decisions on the Kensington and Rock Creek Mines have raised regulatory questions related to water use and discharge. Signatures are currently being gathered for four 2008 state ballot initiatives on mining. They mirror pending legislation, and may influence the legislative session.



Aerial view of Fort Knox mine (Kinross, 2007).

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8.3 MINING LEGACY

Mining helped settle Alaska and create an early economic engine that established rural communities. As easily extractable metals were depleted, abandoned mines remained, along with damaged landscapes and watersheds. Approximately 52 abandoned non-coal mines have been identified in Alaska (ADNR 2006). Some areas still continue to discharge contaminants and require public funding for cleanup. Historic practices have provided mining opponents a bad image, presenting them today as status quo.

8.4 ALASKA MINES TODAY – SOLUTIONS/INNOVATIONS

Currently operating mines provide examples of solutions and innovations used to protect state water resources.

Red Dog Mine in northwest Alaska utilizes a lined tailings dam with seepage collection and pumpback systems, diversion channels, and cutoff walls to protect adjacent watersheds. Tailings impoundment

water is treated and reused in the milling process; 95% of process water is recycled. The mine has improved downstream water quality in Red Dog Creek, reducing naturally high metal sulfides concentrations, and improving fish migration (ACMP 2007, USEPA 2006, SRK 2007).

Fort Knox Mine near Fairbanks is a zero discharge facility. Prior to startup, Fort Knox reclaimed historic placer workings in Fish Creek Valley, built a water supply reservoir designed for fish and post-mining public use, and constructed wetlands for wildlife and waterfowl. Cyanide detoxification lowers concentrations to accommodate waterfowl use of the operational pool. Tailings management includes a valley fill impoundment, extensive seepage collection systems, interceptor well/ pumpback systems, and monitoring wells (ADNR 2003, Kinross 2004).

Pogo Mine, located near Delta Junction, completed its first year of production utilizing 100% recycled process water. Water protec-



Aerial view of plant site at Pogo Mine (Teck Cominco 2007a).

tion measures include cyanide destruction in the milling process, tailings disposal in low permeability underground paste backfill or drystack storage, seepage collection wells, and a downstream recycle tailings pond, diversion ditches, stormwater collection systems, creek buffers, and underdrain systems beneath the tailings drystack. Water recycling utilizes both underground and aboveground treatment plants, soil absorption systems, and injection wells for excess treated water (EPA 2003, Teck Cominco 2007b).

8.5 OUTLOOK AND STRATEGIC CONSIDERATIONS

2008 presents challenges and opportunities for the mining industry, requiring technical and procedural improvements in how the industry does business. The mining industry must take credit for technical

solutions to water use, balance and quality issues, and develop new solutions. This includes approaches to tailings disposal and maintaining instream flow, avoiding watershed contamination, and commitments to long-term restoration and monitoring after mine closure.

Continuous communication, education, and stakeholder/public partnerships are needed. Industry must engage the legislative process this session, provide convincing technical and economic arguments, and offer solutions. Social license to operate initiatives, improving benefits and reducing impacts to affected communities, should be pursued. Permitting and NEPA requirements must be anticipated and incorporated in project design. Finally industry must promote the success stories, innovation, and partnerships it has worked so hard to create.

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