

**ALASKA STATE LEGISLATURE
JOINT MEETING
HOUSE RESOURCES STANDING COMMITTEE
SENATE RESOURCES STANDING COMMITTEE**

March 5, 2008

12:10 p.m.

MEMBERS PRESENT

HOUSE RESOURCES

Representative Craig Johnson, Co-Chair
Representative Bob Roses
Representative Paul Seaton
Representative Peggy Wilson
Representative Bryce Edgmon
Representative Scott Kawasaki

SENATE RESOURCES

Senator Bill Wielechowski

MEMBERS ABSENT

HOUSE RESOURCES

Representative Carl Gatto, Co-Chair
Representative Anna Fairclough
Representative David Guttenberg

SENATE RESOURCES

Senator Charlie Huggins, Chair
Senator Bert Stedman, Vice Chair
Senator Lyda Green
Senator Lesil McGuire
Senator Gary Stevens
Senator Thomas Wagoner

OTHER LEGISLATORS PRESENT

Representative Mark Neuman
Representative Kyle Johansen
Representative Bob Buch
Senator Joe Thomas

COMMITTEE CALENDAR

PRESENTATION: ALASKA MINING

- HEARD

PREVIOUS COMMITTEE ACTION

No previous action to report

WITNESS REGISTER

STEVE BORELL, P.E., Executive Director
Alaska Miners Association, Inc.
Anchorage, Alaska

POSITION STATEMENT: Presented a summary of the current mining projects in Alaska.

KARL HANNEMAN, Manager
Public and Environmental Affairs & Special Projects
TechCominco
Tech-Pogo, Inc.

POSITION STATEMENT: Provided comments.

JIM CALVIN, Partner
McDowell Group
Juneau, Alaska

POSITION STATEMENT: Provided a presentation entitled "Economic Impacts of Alaska's Mining Industry in 2007."

ACTION NARRATIVE

CO-CHAIR CRAIG JOHNSON called the joint meeting of the House and Senate Resources Standing Committees to order at [12:10:57 PM](#). Members present at the call to order were Representatives Seaton, Roses, Kawasaki, Edgmon, Neuman, and Co-Chair Johnson. Also in attendance were Representatives Buch, Johansen, and Neuman and Senator Thomas.

PRESENTATION: ALASKA MINING

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CO-CHAIR JOHNSON announced that the only order of business would be an overview of the Alaska mining industry. He asked Mr. Borell to begin the overview.

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STEVE BORELL, P.E., Executive Director, Alaska Miners Association, Inc., informed members that he would present a summary of the current mining projects in Alaska. Mr. Calvin of the McDowell Group would then provide a benefit review of the mining industry.

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MR. BORELL began his overview, as follows:

Starting right off with Placer Mining ... 2007 and estimated for 2008 - quite similar, more than 100 family mines operating around the state, various others have permits in hand on a given year. If they can get their financing together to pay for the fuel they need and everything else, they'll be out operating. Production is somewhere over 60,000 ounces a year. This picture is an operation I visited this summer on the Seward Peninsula. This was the only bucket-ladder dredge that operated in the state. Historically in the Fairbanks district, particularly and elsewhere, there were dredges of this style that operated, produced most of the gold for a lot of years and this is the last one operating. It's a fairly small dredge. This is a family operation. They've been - they're operating on private land, patented land there. They've been mining there since the early '50s, the Tweets (ph). It's two cousins and their wives and one or two sons that work and they have to fly their fuel in and everything but that's the only bucket-ladder dredge that operated this past year.

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MR. BORELL continued:

Another example of a placer mine and the kind of size footprint that a small placer mine can have, that entire area on your left has been reclaimed and it's in the process of being revegetated. You'll see the airstrip for the particular company there on the right side; they're current mining off picture.

Major projects around the state - the slide is a little bit dark but just to give you a picture. Up in the northwest Arctic, of course, Red Dog and that is not very clear. ... Those are the projects that we'll be talking about plus a couple other smaller ones that - we're talking projects, mines, and exploration projects all around the state providing jobs all around.

First the operating mines, to walk through those.

And these are in order of when they went into production. Usibelli Coal Mine is now in its 64th year of continuous operation. Second was Green's Creek, followed by Red Dog. They both began in 1989. Fort Knox began in the 1995-96 timeframe. Pogo in 2006 began and there is one that has operated intermittently, Dixon Fork out at McGrath, and it currently is idle but we'll talk about that when we get there.

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MR. BORELL continued:

Usibelli Coal Mine, the largest drag line in the state, a 35 yard drag line with - you see the drill in the lower left hand corner and the machine operating. Some statistics for Usibelli: 100 employees; 100 percent Alaska hire; 40 million tons of permitted reserves that mean they have permits in hand right now to mine 40 million tons of coal and they're currently producing 1.5 million tons per year of which 950,000 [goes] to the Interior for power plants, heating plants, etcetera; and then another 350,000, 500,000, depending on the year to Chile and other export destinations; 270 days without a loss time accident and various environment reclamation awards over the years.

Here's a picture to show you - if you come down the road from the top, underneath the word "facilities" - very good, I think we have a spotter. Here is the shop and office complex. The mine is actually back here. You come hauling the coal. It comes up. It dumps into a large hopper in that region. Then the coal is crushed. It goes into a conveyor, comes

across the Nenana River into this storage barn and the railroad goes underneath that and is loaded out and it goes to the customers in that fashion.

The Greens Creek Mine 18 miles west of here on Admiralty Island - at Greens Creek, to give you some reference, that is the portal to go underground. That is where all of the ore comes out in large trucks. The mining is probably taking place down here where this door is on the side, actually way, way below. But, nonetheless, the ore all has to come out here. It crosses Greens Creek. Greens Creek runs right adjacent to the project, right through here. Literally the bridge crosses Greens Creek, the ore stock pile. Here's the mill and the other facilities. There's the power plant. Here's the shop office drive. Statistics: 315 employees, approximately 60 percent of those live in Juneau, 79 percent are somewhere in Alaska; large private sector employer in Southeast; largest taxpayer in the Juneau Borough; more than \$25 million annual wages in benefits and more than \$20 million in supplies and services.

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MR. BORELL continued:

Here's a picture of a roof bolter and to give perspective ... that's a man standing right there on that machine. We're talking a large piece of equipment. This machine is just under \$1 million right now for one of those drills. I'm not sure but I'm going to guess they have four of those at the mine site.

Here's the load-out facility. The ore is brought by truck several miles down. It's dumped inside of this barn, kept in there out of the weather. It goes through a conveyor that's covered, onto a ship and then the ship goes wherever it needs to go around the world.

Red Dog Mine on NANA Regional Corporation lands in the northwest Arctic - the largest producer of zinc concentrate in the world but yet a quite small mine, as the size of mines go - the concentrate is hauled from the mine site 55 miles on this road. This is, I

call it the Red Dog port site, but this is the Delong Mountain transportation system. That system is owned by AIDEA. It is operated by the company. TechCominco have their employees operating it. Here you see the largest building in the Arctic and right behind it barely visible is the second largest building in the Arctic. The largest one is 225 feet wide by 1500 feet long. Those are the storage buildings where the ore is brought. It is stored here across the winter, so it is hauled all of the time and then the ships can come in.

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MR. BORELL continued:

The ships cannot, however, if you see on the screen, here's the load-out, the ships cannot get into that location and so they're using a lightering system. There you see the barge; in this case a FOSS barge lighters the ore out to the ship in deep water several miles offshore. This was a beautiful day. It's not always quite that nice to go out into the Bering Sea.

Red Dog statistics for 2007: 465 employees and full-time contractors; 56 percent of those people are NANA shareholders; \$48 million in annual wages and benefits; \$82 million with 13 different NANA joint venture contractors, including folks that do the hauling of the concentrate from the mine site to the port, that kind of thing.

In 2008 one of the major projects that the company is going to have is nearly a \$9 million drilling program for natural gas. The cost of fuel in the villages of Alaska and, of course, in Red Dog and other mines is astronomical. The folks at TechCominco have been working for several years to find the gas, develop the gas resources that they may have locally right there in their own areas.

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MR. BORELL continued:

This picture shows the Aqqaluk extension project. Again, up here to give you reference, we're looking -

this arrow shows where north is and so here are the existing facilities and this is the main pit. This is where they've been mining since 1989 - this area right here. It looks large but it's - when you compare it to other large mines in the world, it is not a large pit. Let me point out something here. ... This is Red Dog Creek. I recall when the - this is a lined creek. I recall when this was built. It was \$12 million to build that diversion ditch. It's a fully-lined ditch and the purpose of that is to take the fresh water that's falling off the map up on the hillsides and catch that water and bypass it around the mine site so that it does not affect it at all by the lead and zinc and by any acid potential rock drainage.

The project that's being permitted right now that they need, I think we're talking right around 2011. I believe the time period is they need to be mining across Red Dog Creek in this lock deposit. That's where they'll go next. Some people would call it an expansion. It is not an expansion. It's an extension just to keep the mine running right there and keep the jobs in place there at this point.

[12:22:48 PM](#)

MR. BORELL continued:

A major, major issue for the people of the northwest Arctic and for TechCominco and, for that matter, for all the companies is protecting the subsistence lifestyle. Here you see - now we're looking basically from the west across this hill. There's the mill and the mine is in the background but here's just an example of the caribou nonchalantly walking along eating close to the mine.

One of the things that we would fully expect the Legislature to be very interested in is the kind of local taxation that mines can provide. This is the Noatak School. This is the sixth school in the district in the northwest Arctic that is under construction now. Five have been completed. This is possible, in part, because Red Dog Mine is there. This school was at 250 percent of capacity before, and I don't think they are in the building yet actually ... so here's a \$40 million school that is being built

at Noatak, in large part thanks to the fact that Red Dog Mine is in that district.

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MR. BORELL continued:

One last piece on TechCominco - when you see the gold medals and the silver medals and the bronze medals go to the Olympics in 2010, you need to know that there are Alaska metals in those medals that go around those guys' necks. TechCominco, very exciting to see that they're going to be providing the medals for the Olympics.

Fort Knox Mine up, of course, at Fairbanks. In the picture the actual mining area is over here. Their main crusher is there - conveyor belt. This is the mill facility and the leach train, the tanks where the leaching takes place. This is the shop and office warehouse area. This is tailings impoundment. Up in this valley is where the heap leach has been permitted and is in construction right now.

[12:24:55 PM](#)

MR. BORELL continued:

Statistics: 400 employees; no lost time accidents during the year; \$38 million in wages and benefits; \$28 million for electricity. I was reminded talking with someone this morning that the people in the Fairbanks - Representative Kawasaki ... is it still the case that it's still in their bills that shows them how much they are saving because Red Dog is in place? At one time that was on people's bill, it was showing and it was like 7 percent, I believe, for a residential and 10 percent for [business] so, anyway, yes. The fact that Red Dog Mine had a base load of electrical generation there helped everybody in the community very, very directly in their pocketbook. Fuel costs about \$15 million. Heap leach permits were received. The mine life extended to 2014.

This is the same slide that I had last year with the exception that I added 2007, another year without a

lost time accident and we're talking 400 plus people. That's a significant milestone.

A couple of other things about Fort Knox. They poured their 4 millionth ounce of gold in January of 2008. Also in February this last month they recertified. There is a certification program, International Cyanide Management Code. They were certified under that code this past year, a very significant milestone. The companies have to meet some international standards and it is not an easy thing to do. So we congratulate them for that. The heap leach facility is under construction at this point. Phase 7 of the open pit expansion is in place. This year they expect an \$84 million capital budget.

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MR. BORELL continued:

Pogo underground mine northeast of Delta Junction, in this picture we're looking up - this is the Goodpasture River coming below. The original portal is over here. These numbers reference the elevation of the portals. The 1525 portal was the exploration portal. The road that comes from the Richardson Highway comes across. It crosses the Goodpasture River right down to this part here. The actual Pogo Ridge - the mine is underneath this area - the gold mining is taking place and then you have the conveyors. One of them comes out of this portal and there is the mill and the camp shop and those things over here on the side - the airstrip. A quite compact mine site yet still covering quite a few acres.

Here's an underground truck.

MR. BORELL continued:

Pogo statistics: 300 employees and contractors, 100 of those people are underground miners, a specific job class, and underground miners. They achieved commercial production in April of 2007 and in 2007 they produced 260,000 ounces. That's compared with a budget - their goal was 340,000 but equipment problems and other things at the site, ground control issues,

they didn't make it. Their forecast for this year is, again, 340,000 ounces.

This is the water treatment plant. I recall ... this one facility, a huge water treatment facility to process all the water before it's discharged - Dixon Fork - sorry for the darkness of the slide there.

Dixon Fork right now is not operating. It is idled but during the first three-quarters of 2007 it operated, they had 61 employees, 9 percent of which were Alaska hire, 20 additional contracted staff and there's their payroll and supplies and services. They currently have 26 people on site. Their underground definition, ore definition drilling to identify where the ore is and, in the picture you can see the bottom of the airstrip in the center of the picture, that's just the departure and basically - and then tailings impoundment, fully lined. The tailings impoundment is right here. Here's the mill site. The mine is actually right under that location and here's the camp.

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MR. BORELL continued:

Okay. Mines that are under construction right now and the reason we broke it out in this fashion is people hear these different names and they think well we've got all of this mining going on. We only have five large mines in the state operating right now but we have tremendous opportunity for the future. Two projects that are not yet in operation but are under construction, Kensington and C'oeur Alaska just north of Juneau here and Rock Creek at Nome. This is looking up Berner's Bay. Haines is right off there. The actual valley where the facilities are located is right up here. Here's the port site where the people will come in, just like from Green's Creek. They'll come in on a boat, take a van up to the mine site....

There's what the facilities look like right now and their construction is 100 percent complete for the mill and crusher buildings. They have a - it's a 15,400 foot tunnel that goes through the mountain over into the ore body and comes out on the Lynn Canal

side. Underground mine workings are complete. They are in place. They are ready to go to work. The dock at Slate Creek Cove, which we saw on the previous slide, is in place and [indisc.] facilities are all in place. These are the power units right here for the mill - power plant units, and the actual portal is just back here right in the shadow.

One item remains and that has to do with tailings placement. There are two approaches, two alternatives being followed at the same time. Permitting is in place right now. It has begun for a new tailings approach but secondarily an appeal is to the U.S. Supreme Court right now. There is no guarantee that the current permitting approach will indeed be successful and so the company has no choice but to go ahead and appeal the decision of the Ninth Circuit to the Supreme Court.

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MR. BORELL continued:

Permitting schedule needed to allow 2008 operations: January 2008 - submitted modified plan of operations, February 2008 - submitted other applications to the Corps, EPA, State and City and Borough of Juneau. And then we hope by the end of this month to have a decision on the NEPA direction that the project needs to take from the Forest Service followed by a decision in April by EPA and the Court to modify the existing permits. September - authorizations to initiate construction in October begin, whatever the facilities are that are going to be required for the tailings construction then. That's what they very much hope the schedule will look like.

Rock Creek Mill under construction at Nome. This is a picture that I took in August. I was out there. They were just in the process of closing up the walls on the mill itself. Some statistics: 135 employees once they're in operation; an annual payroll ... of \$10.4 million in a remote part of Alaska; \$220.6 million annual supplies and services similarly.

Okay, projects that are in advanced exploration or permitting. The advanced permitting alternative is

Chuitna Coal, PACRIM Coal is the company. This is right across from Cook Inlet. We'll see it in the slide and then the advanced exploration projects - Donlin Creek, which is a Barrick Nova Gold joint venture, and Pebble partnership, which is a Northern Dynasty Mines Anglo-America joint venture.

12:34:02 PM

MR. BORELL continued:

The Chuitna Coal Project - the investment the last time I showed you this slide, they thought their investment was \$450 million and it's up to \$600 million now. That is, I'm sure, a reflection of fuel costs in one case and steel, but the prices of coal, the prices of metal are increasing but the cost to mine is increasing significantly also.

The mine will be 12 million metric tons (MMT) per year. That's what that means: 12 million, then MTPY, metric tons per year capacity. They have 300 metric tons in this thing they call their logical mining unit number one. That's 300 million tons in that little block of area. Infrastructure - a 12 mile access road and conveyor and on the map you can see here comes the road and conveyor down this way, 138 KV power line coming across, personnel housing and an airstrip. Then down at the coast, Ladd (ph) Landing, a logistics center, export terminal and a trestle about 10,000 feet long out into Cook Inlet to load Cape class vessels, meaning the largest vessels in the world, 60 foot draft.

Just one thing here - here's where their permitting is at the bottom. That long acronym stands for Alaska Surface Coal Mining Control and Reclamation Act permit. That's what that long series is. Public review process - they project it for fourth quarter this year. Similarly with the draft supplemental impact statement, I would have you recall that this project was permitted about 15 years ago. It went through an EIS and so this is a supplemental to bring things up to current from where it was at that point; projected approval - late 2009.

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Donlin Creek - Chulista Lands out in the middle Kuskokwim. There you see the 150-man camp facility. The initial mining area would be right over in this vicinity. Donlin Creek update - 2007: eight drills completed 70,000 meters of drilling; 94 percent local hire; over 300 shareholders and descendents were employed at the project site; no lost time accidents and, again, that's a phenomenal kind of thing to be able to say for a large, diverse project; completed a draft feasibility study and then, of course, during the year Nova Gold and Barrick formed Donlin Creek LLC, a joint venture. In 2008, a major focus is looking at electrical power options, this is a huge, huge issue; optimizing the feasibility study; the draft feasibility study; another 21,000 meters of drilling, hopefully completed by May; optimizing plan design; mine plan facilities, etcetera; and continuing the environmental work, some of which has been ongoing first began 10 years or so ago.

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MR. BORELL continued:

This is an exciting drawing, exciting picture. It shows, and actually this shows the 2006 villages, 23 villages in the Lower Kuskokwim that were represented by people working at Donlin Creek in 2006. In 2007 they had 35 different villages represented in the area that worked at the project site and I continue to come across people all around the state that are just so excited to have a major mining project like this in an area where there are so few jobs, so few private sector jobs. This has just been a tremendous thing for the area.

Pebble Project - this is one of the large drills that will drill to 6,500 feet. This is an incredible drilling operation that is ongoing right now. Investment to date over \$220 million, \$87 million of that has been on environmental and socioeconomic studies. In 2007, approximately 700 individuals and 50 consultants active, more than 80 percent Alaska hire, 150 residents of 16 different villages throughout the Bristol Bay region have worked at the project site. I'm not sure what the number is today

but I know they are ramping up to even more. In 2008, and first off I don't see a number from last year, but I recall the number was \$87 million, was the capital expense last year. This year we're looking at \$125 million for that project. That's their forecast, 10 drills drilling to 6,000 foot depths. Ongoing environmental, social and economic and, of course, the Pebble Fund that has just been announced here recently.

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MR. BORELL continued:

Okay. I want to touch on three other projects through, briefly, what we'll call early stage exploration and one of the things that Jim Calvin will talk about when he follows me is there were 29 projects in Alaska that spent over \$1 million each last year. That is a significant increase. I believe it was 23 projects last year and before that it was - I mean in 2006, 23 or something and then tapering off beyond that. Three of the projects I'd have you look at: Niblack, Full Metal Minerals, and International Tower Hill Mines. These are not unique but these are the biggest ones, if you will, of those that are right now in this category of grassroots.

This is Niblack, which is right across on the south Prince of Wales Island. What you see in the picture, you see a cross section of the mountain. This Lookout Mountain, for years it's been drilled and they've spent \$20 million since 2005 here but they've had to set their helicopters, bring their people up and then drill to get down into these areas from clear on top and so it's very difficult drilling, much farther distances of drilling than what you'd like to do and so this year what they began - they began it last year actually. They collared a portal right here and they are driving a 5,000 foot adit into this zone and...at various places along here they'll set up a drill station and then from that location then they'll drill up and down and off into the ore zones to explore it to see what it's like.

The real exciting project - this is potentially another Greens Creek style of mine. Now, is it big

enough? Is there enough ore there for it to be economic? The company believes it makes enough sense to continue at this point, but it's exciting to think that we might eventually have another Greens Creek and especially in support of the people and the pain that the people of Ketchikan have gone through over the years. It is incredible to see a significant potential development there. This year they're looking at \$15 million; 35 work crew on-site; they'll be drilling underground throughout the year.

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MR. BORELL continued:

Another company to tell you about a little bit is Full Metal Minerals. Full Metal has 11 project areas around the state. This year they project having 8 drill programs. They have budgeted \$17 million into those locations. ...On the page it lists out all of the different projects around the state. You can see their names but I'd highlight one of them called the Fortymile. It's on Doyon lands. They expect this year 15,000 meters of drilling. The budget for that project out of the \$17 million for that project alone is \$6.5 million, 24 to 30 workers depending. It's on Doyon land and within the Fortymile area, if you will, that area - and I'm talking an area maybe 20 miles long by 5 miles wide - they have seven prospects they're going to be drilling on in that area.

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MR. BORELL continued:

Another junior mining company spending a lot of money in Alaska in 2007, 75 percent Alaska hire, over \$4.5 million was spent with Alaska companies. They paid state and other land owners \$577,000 and you'll note that in 2008 they are looking at 10 prospect areas. That includes some Mental Health Trust lands. Some of them are on state claims. Some of them are on private Native and other private lands. Budgeted this year at Livengood alone, if you look in the picture upper left, this is the Dalton Highway coming past. So, in a state with so little infrastructure to find an ore deposit that close, and it's hard to see it on here,

this is the area that's highlighted over here on the map, this map area is right there, to find a potential project site that is so close to infrastructure is just tremendous so we're very optimistic, very hopeful that that becomes the case. They believe this looks something like a Fort Knox type of mineralization so if that can be made economic, that's great. ... This is a geologic map showing the two primary target areas that they have and they're budgeting \$7.5 million for Livengood this year.

With that, I will turn this over to Jim Calvin of the McDowell Group. Afterwards I and others will be very willing to answer any questions you have.

[12:45:54 PM](#)

REPRESENTATIVE SEATON asked where the Two Bull Ridge mine is located.

MR. BORELL answered Two Bull Ridge is the current mining area at Usibelli located on the north side of the main Haul Road. He added Usibelli is finishing up reclamation work at Poker Flats.

REPRESENTATIVE SEATON asked if Two Bull Ridge is a coal deposit.

MR. BORELL affirmed that is correct.

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REPRESENTATIVE NEUMAN asked whether it is true that mining companies do not pay a lot of production taxes because the mines are not located on state land.

MR. BORELL affirmed that is correct and said Mr. Calvin would address that topic. He then elaborated:

... Right now, for example, we have one coal mine on state land and we have one gold mine on state land. The gold mine is Pogo. We have one gold mine that is on Mental Health Trust lands, which is a type of state land but, first off, we only have five large mines and, as you'll see from the work that McDowell put together, they're paying a huge amount and we're pleased with that. We love to see that. That's very, very good but you're correct in part that the biggest issue of all is we are in a state that has a

tremendous mineral endowment. We should have 55 mines now, not 5 big mines. We should have 55. We should have mines in every corner of this state and I fully believe that within 50 miles of every village, every hamlet, there should be some kind of a mineral, it may be rock, it may be gravel, it may be peat, but there has to be something that can be mined and providing local jobs for the people in those areas.

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SENATOR WIELECHOWSKI referred to recent television advertisements that say some of the initiatives [on next year's ballot] will stop the mining industry. He asked Mr. Borell if he believes that to be true.

MR. BORELL said absolutely yes. The initiative will stop new mines from operating, as well as the Red Dog Mine.

SENATOR WIELECHOWSKI asked him to explain how.

MR. BORELL deferred to Mr. Hanneman to explain.

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KARL HANNEMAN, Manager, Public and Environmental Affairs & Special Projects, TechCominco, told members the mining industry is very concerned about the effect of the initiatives on the industry, including the Red Dog Mine. He referred to the Aqgaluk deposit adjacent to the Red Dog Creek, which is currently in the permitting process, and said the initiatives preclude the storage of waste rock in proximity to a creek. It will be impossible to meet that prohibition. The initiatives also prohibit any discharge of water, even tap water. Those are drastic measures that the mining industry will be unable to comply with. The initiatives apply to new facilities and expanded facilities so they could close the Red Dog Mine project.

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REPRESENTATIVE ROSES asked if all existing mines have to renew their permits every three or five years and apply for permits to modify their original plans.

MR. HANNEMAN said that is correct and noted the renewal process is every five years, including independent third-party audits.

That is why the mining industry is very concerned that the initiative applies to new and existing projects.

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SENATOR THOMAS suggested that a sectional-type analysis of the initiatives would be helpful to legislators so that they have a better understanding of the effect of each section of each initiative.

MR. HANNEMAN noted his appreciation for that suggestion. He opined that [TechCominco] might be able to use information from a recent judge's decision that found [the initiatives] to be unconstitutional. He acknowledged that decision must be affirmed by the Alaska Supreme Court.

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REPRESENTATIVE SEATON surmised that Mr. Hanneman believes the Clean Water 1 initiative and the Clean Water 3 initiative will have the same effect on mining in Alaska.

MR. HANNEMAN said he believes those two initiatives are very different and the judge found them to be very different. However, the [intent] of both initiatives is to provide prohibitions against storage of waste rock and other things. The mining industry is very concerned that if they are interpreted to prohibit storage, that will result in a shutdown. The judge's opinion speaks to "adversely affect." TechCominco is studying that opinion to determine what that will mean if the initiatives pass.

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REPRESENTATIVE ROSES noted that Greens Creek sits right next to a creek, as does the Red Dog Mine. He asked about the history of water contamination at those sites.

MR. HANNEMAN said the water quality at Red Dog Creek is much better now than it was prior to the mine's inception. He said he is not familiar with the Green's Creek situation but believes it has an exemplary record.

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JIM CALVIN, Partner, McDowell Group, told the committees the McDowell Group is a research firm that has been in business in

Juneau since 1972. He noted this is a particularly exciting time for the mining industry so he is glad to have the opportunity to discuss the McDowell Group's 2005 comprehensive assessment of the mining industry done and its update, entitled "Economic Impacts of Alaska's Mining Industry in 2007." He began a PowerPoint presentation, as follows:

I will start with some employment impacts. Steve gave you a great deal of detail on individual projects. What I'd like to do is roll it all up and talk to you about what it means in terms of overall economic impacts.

We can point to 3500 jobs in the state that are directly attributable to mining industry activity. This includes jobs that are created in the mines that Steve described to you. It also includes jobs associated with about \$275 million of exploration activity statewide last year, about \$275 million worth of mine development activity last year. It also includes jobs associated with industrial minerals development, which of course is integral to all construction activity in the state. That's just the direct employment in the industry. If you consider the multiplier effects of that activity, all of the indirect and induced impacts, we can point to about ... 5,500 jobs statewide that are related to Alaska's mining industry. Those jobs generate an estimated total of about \$340 million in annual payroll. All of these numbers are about 20 to 25 percent higher than where they were in 2004 at the time of our last study.

[12:58:51 PM](#)

MR. CALVIN continued:

Also, I think [it is] particularly noteworthy to indicate that the average annual salary in the mining industry is about \$80,000 a year, which is about twice the statewide average for the economy overall. The mining industry generates the highest average wages in the state, right behind the oil and gas industry.

With this - I don't want to focus too much on the details on this image. What this shows, though, is the geographic distribution of the employment associated with the mining industry. These are the

home towns of people that are employed in various mining projects, exploration projects, development projects around the state. Clearly it's broadly distributed all across the state. In fact, there are 120 different communities that have folks living in them that are employed in the mining industry. I should also add that if we were to overlay on this, all of the people that benefit from royalty payments that are shared via the 7(i) provision of ANCSA, you'd have virtually every community in the state seeing some financial benefit associated with mining industry activity in Alaska.

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MR. CALVIN continued:

I think this was certainly the most interesting finding from our update of our earlier study. This basically summarizes state and local revenues stemming from mining activities in Alaska. In 2004 we could identify roughly \$25 million in state taxes, fees, and local property taxes that were directly related to mining industry activity.

Well, our latest estimates for calendar year 2007 suggest it is now up to about \$185 million. The largest increase in this area has come in mining license taxes and corporate income taxes paid by mining companies. I'll talk in a little bit more detail about these.

Let's first look at some of the local government impacts. Steve alluded to a few of these numbers in his presentation but the point is that the mining industry is a critical source of tax revenue for several jurisdictions around Alaska, not the least of which was the Northwest Arctic Borough, which last year took in about \$9 million in payment in lieu of taxes from the Red Dog Mine operations. The Fairbanks North Star Borough enjoys about \$3 million in taxes from Fort Knox Mine operations. Fort Knox is alternately either the first or second, I think currently the second largest property taxpayer in the Fairbanks North Star Borough. The City and Borough of Juneau benefits from about \$1 million in annual property tax payments from the Greens Creek Mine.

Greens Creek is currently Juneau's single largest property taxpayer. Once Kensington is up and running, hopefully this time next year, they will assume the position as the single largest property taxpayer in Juneau and Juneau's top two payers of property taxes will be in mining operations.

There are a range of other instances where the mining industry contributes to local government coffers, including a \$500,000 payment in lieu of taxes to the City of Delta Junction from the Pogo operation.

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MR. CALVIN continued:

Payments to state government, this is where the big increase has been since our last assessment and now totaling about \$175 million. That includes \$85 million in mining license taxes, a huge increase over the last few years, \$80 million in corporate income taxes, \$8 million in various rents and royalties and a couple of million dollars in other various fees, payments, taxes. As we stand today, the mining industry is the second largest contributor of revenues to state government, behind the oil industry of course but above tourism, above the seafood industry. I also should note that the mining industry accounts for about \$15 million in revenue for the Alaska Railroad. That's about 16 percent of the Alaska Railroad's total freight related revenues. As Steve indicated, there is mining activity on Mental Health Trust Lands and last year that generated about \$1 million in revenues for the Mental Health Trust.

Finally I'll talk briefly about some of the rural and Native corporation benefits. I indicated earlier that there is substantial ANCSA royalties distributed statewide. Early estimates suggest that total royalties paid to NANA, the owners of the property at Red Dog, will be in the neighborhood of \$170 million. Now what's interesting about that is, as a result of the 7(i) provisions of the Alaska Native Claims Settlement Act, 70 percent of that money is distributed amongst the 12 regional corporations. That money then is further, according to 7(j) provisions of ANCSA, distributed to village

corporations. So here's mineral industry revenue generated in the far northwest of Alaska that literally is flowing to every corner of Alaska and some of this money has been a critical source of revenue for village corporations.

Again, Steve alluded to how important employment opportunities are for rural residents of Alaska. We'll point to a couple of examples here that over half of the 465 jobs at Red Dog are held by NANA shareholders. 90 percent of the 200 jobs at Donlin Creek are held by Chulista shareholders. Most recently here in Juneau over half of the construction labor force at the Kensington project were Native affiliated so, an important source of jobs and income for rural residents, Native corporations and their shareholders.

So, take home points from all of this. Dramatic increase in state revenues recently associated with mining license taxes and corporate income taxes. The mining industry continues to play and is playing even a more important part in several local jurisdictions in terms of property tax generation. The industry is growing in terms of its employment impact and, finally, the economic impact will, in terms of employment and royalty sharing in virtually every corner of the state. That's it and I'd be happy to answer questions you might have. Thank you.

[1:05:08 PM](#)

CO-CHAIR JOHNSON said a university study on the number of jobs created from capital investment showed that every \$100 million in capital generated 60 to 70 jobs throughout the economy. He asked if the mining industry may exceed that average.

MR. CALVIN said he believes that is true. For example, the Kensington Mine will invest over \$200 million, with total direct and indirect jobs in the neighborhood of 370. In terms of investment dollars, the mining industry shows a pretty high return in terms of employment. It is labor intensive and pays very high wages. Also, because it is capital intensive, it generates substantial property tax revenues.

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REPRESENTATIVE NEUMAN asked what type of economic multipliers can be assumed off of the funds and whether they are consistent throughout the state.

MR. CALVIN replied multipliers vary among industry and location. For example, a mining industry payroll dollar has a lower multiplier effect in a place like Kotzebue because it does not have the services and supplies available in an urban area. The McDowell Group is currently assessing the economic impact of Red Dog royalties on the state, the Northwest Arctic Borough and on Kotzebue as part of the Aqqaluk EIS project. He continued:

There certainly are different multipliers depending on where in the state you are and there are different multipliers - there's spending and then there is spending. Payroll spending almost immediately for Alaska resident employees in the industry - that's pumped almost immediately right back into the economy. Spending on goods and services might be different. For example, if you're buying equipment to support a mine that may not have quite the multiplier effect because none of the equipment that operates in a mine is manufactured in Alaska, so that has a different multiplier effect.

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REPRESENTATIVE NEUMAN asked if the overall multiplier is in the vicinity of 2 to 4.

MR. CALVIN said the multiplier is about 1.5 in rural parts of Alaska so that every two jobs created by the mining industry create a third job. The overall statewide economic impact would be two mining jobs create a one-quarter time job. Multipliers are not in the 3-4 range because explosives, drill steel and heavy equipment are not manufactured in state.

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REPRESENTATIVE ROSES noted that the mining industry is contributing a considerable amount of money to workforce training and asked whether that figure is included under goods and services in the McDowell Group study.

MR. CALVIN said yes, however what is not captured is the long-term benefit that the training has provided. Exploration projects come and go but the training skills transfer to other

industries, such as construction. It is very difficult to determine the number of people who have benefited from being employed in the mining industry at one point in time.

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REPRESENTATIVE ROSES asked Mr. Calvin to separate that data out in the study because the Legislature has spent a tremendous amount of time and energy on workforce development, particularly with the gas line project. That data would show the amount of money being spent and the percentage of those folks that work in that industry.

MR. CALVIN said he thought that was a good idea and said additionally, mining company contributions to various non-profit agencies are very important to the economy. He told members what is not obvious when looking at the 5,500 mining jobs in the state is the diverse mining related contributions, which filter through the entire economy.

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CO-CHAIR JOHNSON acknowledged that Mr. Calvin's study was done for the mining industry so any further work would be done at the industry's request. He asked Mr. Borell to note the committees' need for further information. He then asked Mr. Borell whether he believes the initiatives would have more of an impact on the Red Dog Mine or the Pebble Mine and to walk the committee through whether an existing mine would be impacted more.

MR. BORELL said he believes without a doubt that the initiatives would shut down both existing and new mines.

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CO-CHAIR JOHNSON asked if the Pebble Mine is in the process of discharging water, which would be prohibited under the initiative.

MR. BORELL said the real issue is not water. He explained:

This is part of the deception of these initiatives. These are not about water. These are about stopping mining and, as Carl delineated awhile ago, you can stop it by not allowing waste rock to be put within 1,000 feet of any stream. That would shut down several of the mines we've just seen the pictures of.

You can do it by the total disturbance area. If it's over 640 acres - broken record, you can't do that. That will affect the small placers also, small family mines in some cases. So it's not really water. It's far more than that.

CO-CHAIR JOHNSON asked Mr. Borell if he had any wrap-up comments.

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MR. BORELL pointed out, in response to the workforce development questions, that many of the 300 Donlin Creek employees in the Kuskokwim area were trained on-site or in their villages. In addition, local people are currently being trained to work at the Pebble Mine project. He pointed out that mine workers must be drug and alcohol free. Without a no-drug policy, the liability costs would be too high to operate. He noted that policy is having quite a positive impact on young people in the villages.

CO-CHAIR JOHNSON commented that he has always believed the best way to keep people drug free is through employment.

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REPRESENTATIVE SEATON asked if any information about the value of the minerals at the mines is available.

MR. BORELL replied the annual state report provides the total value of the minerals produced. The price is based on the assumption of the average market value.

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CO-CHAIR JOHNSON asked:

I want to clarify that. So when we say there is x number of dollars of processing of gold in the state, that's a finished bar process? That doesn't include the processing to get to that standard so that's the value that they look at?

MR. BORELL explained that the state report lists three components of value. The first component is how much money the companies spent out of pocket to do exploration work. The second component is development, which is the money spent on

facilities once the project is deemed economically viable. The third component is the value of the minerals based on the amount of mineral produced times the average annual price of those minerals. Therefore, that value is not what the industry receives, but rather a measure of the value.

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CO-CHAIR JOHNSON said that is similar to saying the value of the salmon that comes out of Alaska is the same as the price charged for a filet in the Seattle fish market.

MR. BORELL said that is correct.

REPRESENTATIVE SEATON asked if the net smelter return value is reported.

MR. BORELL said it is not. This value is defined by taking the amount of metal produced by the average world price.

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REPRESENTATIVE NEUMAN expressed concern about adding value to Alaska products. He pointed out with the new rail spur to Port Mackenzie, gypsum board can be manufactured in the Fairbanks area. He said many container ships arrive in Alaska full but leave empty. He asked Mr. Borell to address the possible expansion of value added products.

MR. BORELL said the extension of the railroad to Point Mackenzie will be great. He thought it will be important to the wood chip business in the Interior at the moment. He stated the timing to get minerals on the railroad is significant. At this point, no one is assuming the railroad will be there so it is not being factored into economic plans. It will be a huge benefit for all of Alaska.

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REPRESENTATIVE WILSON commented that the cost of energy differs at every mining operation. However, a mine located close to a road could mine for lower grade minerals because [transport] expenses are lower.

MR. BORELL said each project differs significantly and that he concurs in general with Representative Wilson's statement. He said the lack of infrastructure in Alaska has kept companies

from exploring here. He noted he was at a conference in January in Vancouver at which many speakers with projects in British Columbia discussed the extent of British Columbia's infrastructure. Proximity to a road is a huge factor. Mining almost always pays for its own infrastructure. He said although AIDEA made the infrastructure investment at the Red Dog mine, Cominco guaranteed payment of a certain amount annually. Cominco has now paid over \$250 million for the use of that facility.

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REPRESENTATIVE EDGMON said the one issue that has not been touched upon today is that if large scale mining becomes more prevalent, environmental issues will crop up. In addition, climate changes are occurring. He continued:

I guess what I am trying to say is that mining reform is on the horizon here in Alaska at some point. When I say reform I don't mean take the mining industry and do what the clean water initiatives purport to do and, in fact that is what they do, shut down the industry because I think that would be blatantly unfair and unwarranted. But reform in the sense that the laws - the [indisc.] reclamation, the taxation regime, all that catches up to where the industry is in terms of its development and exploration in Alaska is sort of on line with the 30 days that we spent with the oil industry last fall here in the halls of the Capitol here.

So, having said all that, you may disagree with that point but, I guess two questions. Number one is, is mining reform on the horizon from the association's perspective? And, if it is, is the association going to be a willing player to make sure it is done so that the investment climate and the regulatory climate is fair to the industry, as well as fair to the state and its interests?

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MR. BORELL replied the association will be involved in whatever takes place. He said he partially disagrees with Representative Edgmon's perspective and continued:

We have today what I would call a very progressive taxation policy and, again, remember we only have five mines, only two of which are on state land. An example that I like to give is Greens Creek in 1993 shut down. They reopened about 18 months later. If there had been a different tax regime in place instead of a net tax, Greens Creek I can guarantee you would have shut down sooner and those people would have lost their jobs sooner and it would have been shut down for a longer period of time later. It's a fact that during that shut down period, Kennecott and Hecla looked strongly at whether or not they should even reopen the mine at all. They did a significant amount of additional underground drilling during those 18 months and they discovered the Southwest ore deposit, which was significantly deeper, and they made the decision and thank goodness they did because they could have reclaimed that mine. They could have shut that mine down in the mid-1990s but they didn't. They kept at it. If there had been a different kind of a tax regime in place, a gross tax for example, an NSR, which is a gross tax, if that had been in place, we may not have Greens Creek today and the City and Borough of Juneau may not have its largest taxpayer today.

So we need to look at every single one of those pieces very, very carefully if somebody is going to propose changing those because we have a tax regime in place. We have one that many, many companies have looked at. They've watched Alaska. They've said hey, the mineral industry has a ... secure, in place permitting system and taxation system in place - I mean the state does at this point and they've been here investing because of that and to now pull the rug out from under them I think the Legislature would be wise to consider that very, very carefully before they did something like that.

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REPRESENTATIVE EDGMON said a tremendous amount of energy is required for mining development. He asked what the industry is doing in the face of the challenging energy requirements to get to the development stage.

MR. BORELL said Barrick and other mining companies are looking into wind generation and nuclear power as part of a power mix. The City of Galena's work is being watched [but is not timely for current mine development]. Companies are scrambling, looking for every possible alternative. He furthered:

A real significant advantage that the Cook Inlet basin has right now is for use of the coal and the sequestering of the carbon dioxide and using it to then pressurize the structures for further oil recovery. It looks, and at the same time so you gasify the coal, you need a power plant for the Agrium - to go with the Agrium plant. They would then have a feedstock for their products and there would be a power plant there that would have excess capacity so that could help provide some of the power, which of course is right on the grid. The carbon dioxide that's left over afterwards could be put down in Cook Inlet basin. To me it's a win-win-win. Whether or not than can go forward, we'll see.

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CO-CHAIR JOHNSON noted his agreement, as mentioned earlier, that in most cases the mining industry pays for its own infrastructure. He said he is looking at high lines to feed some of the rural communities and take some pressure off from diesel generation. He likes the idea of being able to ship power generation to the communities, as well as to the industry. He asked Mr. Borell what the total power consumption is for the mining industry.

MR. BORELL said he will take a look at that.

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REPRESENTATIVE WILSON asked how Alaska compares to other states in terms of its environmental regulations being more or less restrictive.

MR. HANNEMAN said the umbrella over all mining activity is the federal NEPA (National Environmental Protection Act) process. However, within that the state has developed its own permitting process. The technical review and scientific analysis are managed cooperatively by both. The rigor applied is determined by the federal umbrella. The state coordinates the state and federal processes to minimize duplication and improve

communications. The State of Alaska's process is good in that regard but it is still rigorous.

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REPRESENTATIVE ROSES asked for more information about possible gas production at the Red Dog Mine.

MR. HANNEMAN replied:

Just related to the geology in the area, there's a potential for shale gas. The geologic formations are not very conducive to producing gas but we know it's there and it's worth the test. There is an ongoing program underway to test the viability of developing the gas that's known to be in the shale in that surrounding area.

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REPRESENTATIVE ROSES asked whether the quantity is known.

MR. HANNEMAN said the quantity and whether it is producible is speculative at this point.

REPRESENTATIVE ROSES noted gas development in that area would have a tremendous economic impact on the local communities.

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CO-CHAIR JOHNSON asked Mr. Hanneman if TechCominco's objective is to use a gas turbine at the mine and to sell surplus power to surrounding communities.

MR. HANNEMAN said that is a possibility.

There being no further questions, Co-Chair Johnson thanked all participants for attending the meeting.

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ADJOURNMENT

There being no further business before the committee, the House Resources Standing Committee meeting was adjourned at 1:28 p.m.