



Alaska Trollers Association

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March 14, 2017

Representative Louise Stutes, Chair
House Fisheries Committee
Alaska Legislature
Juneau, AK 99811

Dear Representative Stutes and Committee Members:

Thank you for hosting a hearing on Transboundary River mining issues. Alaska Trollers Association (ATA) supports HJR 9, which encourages the United States to engage Canada to find meaningful ways to protect transboundary watersheds from degradation and secure the interests of Alaska and other stakeholders who would be harmed as a result of catastrophic events stemming from mining and other development. This matter is of significant importance to our members and the many Southeast residents who rely on an abundance of healthy fish, wildlife, and plants for their livelihoods and sustenance. Regrettably, I am unable to attend the hearing, so offer the following for your consideration and review.

ATA has been involved in Transboundary (TBR) mining issues for several decades, starting with the Tulsequah Chief mine in the Taku River watershed; the mine has been defunct since the 1950's. Various mining companies have attempted to reopen the mine, but many of the proposals for the mine and associated in-river transport of equipment, fuel, and ore were unrealistic given the topography of the area and morphology of the river; concepts presented would have put our fisheries at significant risk. In the years since mine closure, the site has leaked acid waste into the watershed and very little effort has been made to assess the impacts on the watershed. The most recent mine operator, Chieftain Metals, set up a water treatment plant, but as is so often the case, market conditions changed and the company gave up its plans for the project. Chieftain Metals is currently in receivership. As a result, any headway made on water treatment has fallen by the wayside. British Columbia officials have said that the province will take over site remediation and we hope they will make good on that commitment. However, recent media statements lead us to wonder if clean up might only be initiated if it is proven that harm has been done.¹ Time will tell.

To give you a sense of the types of concerns we have about development in the transboundary watershed I've attached a few of our association's comments covering various TBR mining topics. Included is an overview of the larger mining projects slated for the TBR region and a letter from Carol Bellringer, British Columbia's auditor general, introducing a report highlighting program deficiencies and concerns revealed during last year's audit of the mining program. One statement was particularly troubling, *'[w]e found almost every one of our expectations for a robust compliance and enforcement program ... were not met.'*²

As we all know, accidents happen. The Mount Polley tailings dam breach provided a stark reminder of this at a smaller scale mine. But what if the same situation erupts at a mine six times (or more) the size of Mt. Polley,^{3,4,5}

¹ <http://juneauempire.com/news/2017-03-05/toxic-water-leaches-prime-alaska-canada-salmon-habitat>

² [B.C. Auditor General Report](#)

³ <http://www.mining.com/web/mount-polley-mine-disaster-followed-years-of-permit-delays-report/>

⁴ <https://www.mountpolleyreviewpanel.ca/>

⁵ <http://www2.gov.bc.ca/gov/content/environment/air-land-water/spills-environmental-emergencies/spill-incidents/past-spill-incidents/mt-polley>

like the Kerr-Sulphurets Mitchell (KSM)? The KSM mine is located in the Unuk River watershed. Recently, Southeast fishermen have been conservatively managed to help boost production of Unuk River king salmon. This year closures to protect fish from the Unuk and several other transboundary rivers will be the most punitive experienced in the last 40 years. In the case of our fleet, those management actions extend dozens of miles from the river itself and make our spring king fisheries extremely challenging. All user groups will be restricted in hopes of increasing productivity, which appears to have dropped more as a result of changing ocean conditions than fishing. This makes inriver habitat even more important to the long term health of fish stocks.

What happens if discharges or activity from mine development at KSM, or the other mines, negatively impact water quality, spawning and rearing areas, or the health of juvenile fish? KSM's mine is on the Unuk River and its two '1000 year' tailings dams are slated for the Nass River. Under the Pacific Salmon Treaty, fishermen in Southeast Alaska and Northern British Columbia are directly managed for salmon that come from the Nass River.

The KSM mine is anticipated to produce 130 tons of ore per day for more than 50 years and could involve chipping away a portion of a glacier. Despite its largess, British Columbia denied requests to conduct Canada's most rigorous review prior to permitting the KSM mine. It is difficult to imagine how much bigger a project would have to be to garner this seemingly appropriate review.

The reach of just the KSM mine will be extensive and there are many other large and mid-range mines planned for the region. The cumulative impacts could be immense. If there are accidents, who will pay? There is nothing to force British Columbia or the government of Canada to do so. Can Alaska afford to step up and mitigate habitat damage? What about the direct loss of fishing and hunting opportunity, or the broad scale community harms that could result from degraded habitat or a mining accident affecting water quality or fish and wildlife resources? Monitoring, enforcement, and liability questions have not been addressed in any way and, according to both state and provincial officials; this will take federal action to resolve and finance. This is why ATA supports HJR 9.

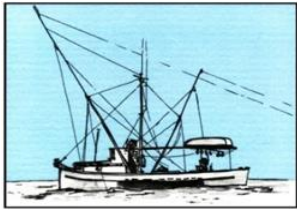
For the good of our region and the state, Alaska must officially call on the State Department and other federal agencies to engage the Canadian government on this matter. Getting ahead of this issue is critical and time is of the essence. Establishing clear lines of responsibility and a plan of action will not only be of benefit to Alaska residents if there is an accident, it will also help maintain relationships with the province should things go awry.

It is encouraging that your committee is taking an active interest in this issue. You have a solid list of speakers and I hope the hearing is enlightening and provides information and ideas to help define the path forward. If there is anything ATA can do to assist you as a committee, or individually, please don't hesitate to contact me.

Best regards,



Dale Kelley
Executive Director



Alaska Trollers Association

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August 15, 2016

The Honorable Lisa Murkowski
709 Hart Senate Office Building
Washington, DC 20510

Dear Senator Murkowski:

Thank you for all that you are doing to assist commercial fishermen and other interests who are concerned about Canadian mine development in transboundary watersheds that flow into Southeast Alaska. We appreciate that the delegation has gone to great lengths to encourage the Department of State (DOS) to formally raise this matter with Canada and help the two countries find mechanisms to protect our shared watersheds and the region's stakeholders. Alaska Trollers Association (ATA) believes that essential elements include legally binding financial assurances and third-party project reviews. I am writing to reiterate our concerns about British Columbia's mining program in our shared watersheds and to urge you to continue your efforts to persuade Secretary Kerry to engage with Canada on this matter.

As you know, the introduction of electrical power to the region has spurred exploration and development of no less than ten large-scale mines along the border between Southeast Alaska and British Columbia. This area is quickly transforming into one of the biggest mining districts the world has ever seen. These mines are in various stages of approval and start-up and positioned along watersheds that house salmon stocks of significant importance to both Alaska and British Columbia. Most of these stocks, and the fisheries that harvest them, are subjected to protective provisions of the Pacific Salmon Treaty.

The Taku, Stikine, Unuk, and the Nass rivers provide tens of thousands of salmon and other varieties of fish and wildlife each year. Fishermen are concerned about the heightened risks posed to these systems by large mines, whether to rivers, tributaries, and streamside habitat or glaciers which provide important nutrients and cool water. Each of the operations envisioned has the potential to negatively impact valuable fisheries resources and local foods, at significant financial and social cost to Alaska residents, businesses, and communities.

ATA represents commercial salmon trollers who operate in state and federal waters from Dixon Entrance to Cape Suckling. There are currently 1,938 active troll permits, 86% of them owned by Alaskans primarily living and working in Southeast communities. Trollers make up the largest resident Alaska fleet. On average, 1,100 hand and power trollers and their deckhands make deliveries each year; roughly 1 of every 35 people in Southeast works on a troll boat. Like all southeast salmon fishermen, trollers are highly reliant on fish that spawn and rear in, or near, Transboundary Rivers. In 2013, trollers landed 28 million pounds of salmon valued at over \$41 million, which directly put over \$837K in fisheries business tax into Alaska's general fund and communities, in addition to helping fuel a broad network of support businesses. Many trollers also harvest halibut, cod, and shellfish, which all rely on the watersheds impacted by transboundary mining. Trollers pay to help finance the region's hatchery programs, which provide salmon for all user groups; these fish also depend on the availability of clean water and rearing areas. Many troll permit holders are part owners of a seafood processing cooperative, freeze their catch at sea, or direct market their products, which means a separate level

of reliance on healthy watersheds.^{6 7}

The seafood industry is critical to the economic health of Southeast Alaska and includes thousands of other fishermen and support sector businesses. In 2013 and 2014, more than 12,000 people were directly employed harvesting, processing, or working at hatchery facilities. All total, 291 million pounds of seafood, valued at \$260 million, was harvested in 2014 by Southeast fishermen, where nine communities typically number among the nation's top ranked fishing ports for volume and/or value – three (Sitka, Ketchikan, Petersburg) consistently in the Top 20. In 2014, Juneau ranked 51st and Wrangell 75th. Across the region 54 shorebased operations processed 235 million pounds of seafood in 2014, with a first wholesale value of \$520 million. In addition, thousands of recreational, personal use and subsistence fishermen harvest fish each year; and, many residents also hunt and gather local foods.^{8 9}

The State of Alaska is currently negotiating a Statement of Cooperation (SOC) with British Columbia, which involves a number of cooperative programs and initiatives. In a January 21, 2016 letter to transboundary river stakeholders regarding the draft agreement, Lt. Governor Byron Mallott indicated that Alaska does not intend to spend any money in support of its terms. The state is also limited in its ability to compel implementation of protective mechanisms or hold either British Columbia or Canada liable for mitigating losses, because, “...*the State of Alaska does not have the authority to enter into a binding agreement with a foreign nation.*” The state obviously does not have the financial wherewithal to undertake the monitoring programs necessary to assess impacts from the mines, much less clean up and mitigate any potential damage.

It is unlikely that British Columbia will be in any better position to deal with significant problems given that in March 2016, the Crown Contaminated Site Program indicated that the cost to the government to clean up abandoned, contaminated mines currently stands at over half a billion dollars (\$508 million).¹⁰ This is more than 200% more than estimated in 2006 and a \$224 million increase in just two years. Of 84 mines identified since 2003, only 18 have been remediated. 16 more are in progress with the remaining 48 triaged as low priority, but only because they aren't thought to pose an immediate risk to human health. The Britannia Mine, a copper producer north of Vancouver has so far cost the tax payers \$64 million. One year after the Mount Polley mine tailings breach the Provincial government reported \$6 million spent. Imperial Metals claimed to have spent \$67 million, though some evidence suggests the taxpayers subsidized over \$23 million of that amount.

Therefore, even if the state and province take action to boost cooperation at the border and implement enhanced monitoring programs, the United States government will still need to put into place agreements with Canada to ensure adequate environmental protections and indemnification of losses Alaska and its citizens could incur as a result of this mining activity. Given the size and scale of the development planned - in multiple critical habitat areas - and the value of fish and wildlife to our state and region, a multi-pronged approach is the only way to truly safeguard Alaska's interests as they relate to clean water and healthy resources.

British Columbia's Minister of Energy and Mines Bill Bennett has stated, “... *I would not foreclose or dismiss the future opportunity to involve the federal governments if they can help.*” ATA believes the federal governments can, and absolutely must, help.

The recent game-changing report from BC's Auditor General¹¹ revealed that the Minister of Energy and Mines currently holds security deposits that are woefully insufficient to cover environmental costs to the province from

⁶ [2015 ADOR Annual Report](#)

⁷ [Commercial Fisheries Entry Commission](#)

⁸ [The Economic Value of Alaska's Seafood Industry, McDowell Group, December 2015.](#)

⁹ [Top Major Ports by Pounds ; Top Major Ports by Value](#)

¹⁰ [Crown Contaminated Sites Program Biennial Report, 2016.](#)

¹¹ [An Audit of Enforcement and Compliance of the Mining Sector, May 2016.](#)

unexpected mine pollution. The report probably underestimates the cost of a catastrophic event, since the \$2.1 billion deemed necessary to meet liabilities is unlikely to include remuneration for losses incurred by industries and local residents – much less Alaskans. Mount Polley residents are still waiting for their government to make things right. To make matters worse, a new report by the Union of British Columbia Indian Chiefs claims that the Ministry's unfunded liability grew from \$228 million in 2000 to \$1.3 billion in 2014. In the past, BC's Public Accounts used to tally net liabilities and report them to the public as a matter of course, but since 2015 the Ministry has failed to disclose these figures or the risks they pose to regional and national security.

This information, on the heels of the well-publicized Mt. Polley Mine breach, and as Red Chris begins production, adds gravity to the fact that it is not a matter of 'if' such an incident will occur, but 'when'. The Tulsequah Chief mine has been polluting the Taku River for close to 60 years and the BC government has done virtually nothing to remedy the situation. This makes fishermen dubious that any agreement lacking explicit and enforceable protections for Alaskans will adequately protect their interests.

The auditor general indicated that nearly all expectations for compliance and enforcement of the mining industry were, and remain, unmet. Further, she highlighted a ministerial culture of promoting mines over protections and an ongoing resistance to implement needed change. Establishing clear rules and commitments between the countries, the state, and province - long before we ever need them - will help protect both our interests and regional relationships in the event of a catastrophic incident.

At present, it is BC taxpayers who pay when mining companies pollute or declare bankruptcy and disappear from the scene. If mine-related pollution from one or more of the transboundary mines denigrates Alaska resources, will the BC government ask its taxpayers to make Alaskans whole? That seems highly unlikely, unless the federal government secures in advance, formal contracts binding Canada and BC to explicit and enforceable provisions. Any agreement must include fair compensation for the state and Alaska communities, businesses, and families.

Senator Murkowski, I recently returned from fishing in southern Southeast and meetings with fishermen in Sitka. Nearly everyone I spoke to listed BC mining in the transboundary area among the top tier of the potential long-term harms to our industry. ATA and its members recognize and appreciate the personal energy you are devoting to this important issue, yet we also know there is a long way to go to secure the interests of the state and its citizens. This is a financial issue - for Alaska as well as our fish and wildlife-reliant industries and communities. All eyes are firmly affixed on state and federal officials; we know Alaska can't prevent BC from mining, but there is an expectation that our elected officials will do everything in their power to ensure that our shared resources are protected and local businesses and families will be made whole in the event things go awry. Again, the efforts of the delegation are duly noted, and much appreciated. ATA anticipates the Walker Administration will work in tandem with you on next steps and we look forward to providing whatever support we can for those efforts.

It is ATA's hope that the delegation and state will build on your efforts to convince the Administration, Secretary Kerry and DOS that the U.S. and Canada must undertake diligent project reviews, like the IJC, and establish meaningful, enforceable rules and commitments to protect Alaska's interests and mitigate the region's losses that could occur as a result of development in transboundary watersheds.

Again, thank you for your staunch, personal support and energy on this matter. If I can be of assistance on this or other issues of concern to the seafood industry, please don't hesitate to contact me.

Best regards,

Dale Kelley
Executive Director

AUDITOR GENERAL'S COMMENTS

The mining industry has a long history in British Columbia and continues to be an important source of employment for thousands of people. Government has stated its plan to continue to support and develop this industry by creating opportunities for new investment.

However, the recent decline in commodity prices has left many mining companies struggling to survive. Regardless of whether the mining industry is experiencing growth or slow-down, protection of the environment needs to be ensured.

This is only possible through strong regulatory oversight. We conducted this audit to determine whether the regulatory compliance and enforcement activities of the Ministry of Energy and Mines (MEM) and the Ministry of Environment (MoE), pertaining to mining, are protecting the province from significant environmental risks.



Carol Bellringer, FCPA, FCA
Auditor General

We found almost every one of our expectations for a robust compliance and enforcement program within the MEM and the MoE were not met.

We found major gaps in resources, planning and tools. As a result, monitoring and inspections of mines were inadequate to ensure mine operators complied with requirements. The ministries have not publicly disclosed the limitations with their compliance and enforcement programs, increasing environmental risks, and government's ability to protect the environment.

During the course of this audit, these risks became a reality and a disaster occurred when the tailings dam at Mount Polley failed – releasing approximately 25 million cubic metres of wastewater and tailings into adjacent water systems and lakes. It may be many years before the financial, environmental and social implications are fully known.

AUDITOR GENERAL'S COMMENTS

After the failure at Mount Polley and during our audit, we felt it necessary to review MEM's performance as regulator for this site.

We noted the same issues in the Mount Polley file as we did throughout the audit – that is, too few resources, infrequent inspections, and lack of enforcement.

Our advice, to reduce the risk that unfortunate and preventable incidents like Mount Polley don't happen again, is for government to remove its compliance and enforcement program for mining from MEM.

MEM's role to promote mining development is diametrically opposed to compliance and enforcement. This framework, of having both activities within MEM, creates an irreconcilable conflict. Because compliance and enforcement is the last line of defence against environmental degradation, business as usual cannot continue.

I am therefore disappointed in the resistance to this overall recommendation as it is consistent with many other jurisdictions' response to similar incidences. In addition, it is disconcerting that government will not be disclosing its rationale for decisions that it makes in the public's interest under section 137 of the *Environmental Management Act*. The next opportunity to discuss these and other areas of disagreement and the contents of this report, will be at a meeting of the Select Standing Committee on Public Accounts.

This was a very large and involved audit. I appreciate the dedication and commitment that everyone, both in the ministries and my Office, showed to see it through to completion.



Carol Bellringer, FCPA, FCA

Auditor General

May 2016

British Columbia Mining Update

Transboundary Region Projects and Mount Polley Mine

PROBLEM: Weakened environmental regulations and the construction of a new power line have helped pave the way for at least 10 large-scale mines in Northwest British Columbia (B.C.), a region quickly becoming one of the world's largest mining districts. The mine properties are located in the headwaters and tributaries of the Taku, Stikine, and Unuk Rivers, which originate in B.C. and flow into Southeast Alaska. Existing and proposed mine development is likely to damage habitat and produce acid generating mine waste, which could degrade water quality and harm fish and wildlife. A devastating tailings dam breach at the Mount Polley Mine in Likely, B.C. recently revealed the province's inability to adequately safeguard the environment and mitigate its resident's losses. Acid mine drainage from the Tulsequah Chief Mine near the Taku River has been leaching into the watershed since the 1950s, yet British Columbia has done nothing to clean up the mess.

SOLUTION: Secure enhanced project reviews and enforceable provisions to protect water quality, fish and wildlife. Legally binding financial assurances are needed to mitigate the state and its residents, dependent businesses, and communities in the event of damage stemming from development in transboundary watersheds. Alaska's congressional delegation and dozens of municipal governments and local businesses, commercial, sport, and tribal organizations, NGO's, and private citizens are calling on the U.S. Department of State to secure such protections through engagement with Canada under the [Boundary Waters Treaty](#).

SELECT MINE OVERVIEW

TAKU BASIN:

- [Tulsequah Chief](#) (Chieftain Metals)
 - **Status:** Reviews & permitting complete; [Chieftain Metals in receivership](#) as of Sept. 2016
 - **Location:** 10 miles from Alaska border
 - **Water Bodies of Concern:** Taku and Tulsequah Rivers
 - **Mine Description:** Historic underground copper, lead, zinc, silver, and gold
 - **Estimated Mine Life:** Closed in 1957 with periods of development activity until 2012.
 - **Estimated Daily ore extraction:** None at this time.
 - **Tailings Disposal Method:** N/A
 - **Tailings dam or water storage dam proposed or permitted?**
 - **Known Issues:** Acid mine drainage; short-lived remedial water treatment terminated 2012.

STIKINE BASIN:

- [Galore Creek](#) (NovaGold 50%, Teck 50%)
 - **Status:** Review & permitting complete; project on hold pending site optimization.
 - **Location:** 25 miles from Alaska border
 - **Water Bodies of Concern:** Stikine River, Galore Creek, Iskut River
 - **Mine Description:** Proposed open pit copper, gold, and silver
 - **Estimated Mine Life:** 18 years
 - **Estimated Daily ore extraction:** Up to 95,000 tons per day
 - **Tailings Disposal Method:** Submerged containment at West More Tailings Facility - one main and two saddle dams. Capacity 678 Mt of tailings; current mine plan envisions 510 Mt.
 - **Tailings dam or water storage dam proposed or permitted?** Yes. And, treated water from the filter processing plant will be discharged into Iskut River.

- [Schaft Creek](#) (Teck Resources, Ltd. 75%, Copper Fox 25%)
 - **Status:** Project in pre-application phase with feasibility and some engineering studies complete. Comprehensive study terminated May 2016 when Teck requested to withdraw.
 - **Location:** 40 miles from Alaska border
 - **Water Bodies of Concern:** Stikine River, Schaft, Hickman, and Mess Creeks
 - **Mine Description:** Flotation/open pit, copper, gold, molybdenum, and silver
 - **Estimated Mine Life:** 21 years
 - **Estimated Daily ore extraction:** 130,000 tons per day
 - **Tailings Disposal Method:** Tailings ponds
 - **Tailings dam or water storage dam proposed or permitted?** unclear
 - **Known Issues:**

- [Red Chris](#) (Imperial Metals)
 - **Status:** In production; first copper concentrate in Feb. 2015
 - **Location:** 150 miles from Alaska border
 - **Water Bodies of Concern:** Stikine River, Trail Creek, Quarry Creek
 - **Mine Description:** Open pit copper, gold, silver; 71,826 acre footprint (112 sq. miles)
 - **Estimated Mine Life:** 28 year (commenced operations in 2015)
 - **Estimated Daily ore extraction:** 30,000 tons per day; potential up to 150,000 tons/day.
 - **Tailings Disposal Method:** Three tailings dams over life of project.
 - **Tailings dam or water storage dam proposed or permitted?** Yes.
 - **Known Issues:** Requires a Fish Habitat Compensation Plan (FHCP) to mitigate Trail Creek.
 - **Other:** Tahltan Nation and Imperial have Impact, Benefit and Co-Management Agreement

UNUK BASIN:

- [Brucejack](#) (Pretium Resources)
 - **Status:** Under construction and expected to open in 2017.
 - **Location:** 28 miles from Alaska border
 - **Water Bodies of Concern:** Unuk River, Brucejack and Sulphurets Creeks
 - **Mine Description:** Underground gold project with 301,798 acre footprint (471 sq. mile).
 - **Estimated Mine Life:** 18 years
 - **Estimated Daily ore extraction:** 2,700 tons
 - **Tailings Disposal Method:** Cement paste backfill or placement in Brucejack Lake (no fish)
 - **Tailings dam or water storage dam proposed or permitted?** No.
 - **Known Issues:** Alaska was not involved in the review/assessment process.

- [Kerr-Sulphurets Mitchell \(KSM\)](#) (Seabridge Gold)
 - **Status:** Project approved in Dec.2014; in permitting phase (150 permits required).
 - **Location:** 22 miles from Alaska border
 - **Water Bodies of Concern:** Unuk, Nass & Skeena Rivers, Sulphurets and Mitchell Creeks, Misty Fjords National Monument
 - **Mine Description:** Open pit copper and gold (largest in No. America; 5th in the world)
 - **Estimated Mine Life:** 52 years
 - **Estimated Daily ore extraction:** 130,000 tons per day
 - **Tailings Disposal Method:** Tailings Management Facility drains into non-transboundary Nass River watershed, which supports salmon harvested in Alaska and British Columbia.
 - **Tailings dam or water storage dam proposed or permitted?** Yes. 540' water storage dam, water treatment facility and waste rock disposal locations in Sulphurets (fish) and Mitchell (no fish) watersheds, which drain into the Unuk River.
 - **Known Issues:** State / Federal government / Alaskans requested the more rigorous Panel Review available under Canada's process; request denied by Canadian government.

PORTLAND CANAL

- [Red Mountain](#) (IDM Mining, Ltd.)
 - **Status:** Application complete, now in assessment phase.
 - **Location:** 11 miles from Hyder, AK
 - **Water Bodies of Concern:** Portland Canal
 - **Mine Description:** Underground gold and silver
 - **Estimated Mine Life:** 5-7 years
 - **Estimated Daily ore extraction:** 1,000 tons mineral ore per day and 275K per year
 - **Tailings Disposal Method:** All potential discharge will enter Portland Canal.
 - **Tailings dam or water storage dam proposed or permitted?** No?
 - **Known Issues:**

OTHER

- [Mount Polley](#) (Imperial Metals)
 - **Location:** Likely, British Columbia
 - **Water Bodies of Concern:** *Hazeltine Creek*, Quesnel Lake, Cariboo & Fraser Rivers
 - **Mine Description:** Open pit gold and copper with a 48,435 acre footprint (76 sq. miles)
 - **Estimated Mine Life:** 28 years (commenced operations in 1997)
 - **Estimated Daily ore extraction:** Prior to 2014 tailings dam breach, about 20,000 tons per day and 7.3 million tons per year. Project restart in 2015 limit of 4 million tons for one year; production limits lifted in summer 2016.
 - **Tailings Disposal Method:** Temporarily stored in the Springer Pit. In June 2016 Company given permission to use the repaired and buttressed tailings storage facility.
 - **Tailings dam or water storage dam proposed or permitted?** Yes.
 - **Known Issues:** a) Tailings dam breach in Aug. 2014 released about 17 million cubic meters of water and 8 cubic meters of tailings material into Hazeltine Creek, Polley Lake and Quesnel Lake as salmon were returning to the Fraser River watershed. b) August 2016 Imperial re-opened Mt. Polley with new rules including weekly reporting and submission of a long-term water treatment plan. c) June 23, 2016, mine authorized to return to normal operations. d) [Mount Polley Independent Investigation and Review](#)

SIGNIFICANT EVENTS

British Columbia

- Minister of Energy and Mines Bill Bennett visited Juneau in August of 2015 and met with fishing, environmental and tribal representatives. After flying the Taku River to view acid mine drainage at the Tulsequah Chief Mine, he assured Lt. Governor Mallott that B.C. would take care of the mess. The cost of water treatment at the site is estimated at \$2-4 million per year. To date, nothing has been done and mine owner Chieftain Metals has entered into receivership, while Minister Bennett has announced his retirement.
- The Harper Administration weakened regulations to protect fish and the environment.
- The [Auditor General](#) reported in May 2016 that B.C.'s mine sector compliance and enforcement put the environment at risk, "[a]lmost all of our expectations for a robust compliance and enforcement program were not met."
- An independent [economist report](#) in May 2016 exposed the inadequacy of B.C.'s financial assurances regime for the mine site reclamation program; funds available are insufficient to pay for potential environmental damages and no provisions exist to cover 3rd party losses. Unlike past years, the government no longer provides this information to the public.

State of Alaska:

- Lt. Governor Byron Mallott has taken the lead on this issue and established an inter-agency [Transboundary Working Group](#).
- State of Alaska has been meeting with US and Canadian officials and the stakeholders.
- The state signed a Memorandum of Understanding and Cooperation ([MOU](#)) with B.C. in November 2015, which voices a commitment by the parties to do such things as share information; sustain the environment - including transboundary watersheds- promote marine transportation, safety, and job creation; and, engage local and tribal governments and other stakeholders. The MOU creates a Bilateral Working Group on the Protection of Transboundary Waters. The MOU does not bind the governments or include financial assurances of any kind.
- Alaska and B.C. negotiated a Statement of Cooperation (SOC) to support the MOU, which was signed in early October 2016. Stakeholders expressed concerns about the agreement, particularly the lack of funding to implement its terms or protect Alaska's interests. The MOU package still lacks enforceable measures to hold industry and British Columbia/Canada accountable and binding provisions to mitigate losses that might be incurred by Alaska or its citizens in the event of a catastrophic event. No commitment was made by British Columbia through the MOU or SOC to work to secure such protections from the federal government.
- B.C. announced in Oct. 2016 plans to take over cleanup at Tulsequah Chief Mine.

Congressional Delegation:

- Multiple [letters](#) to US Department of State calling for federal action to protect AK interests.
- Senator Murkowski [secured](#) Department of Interior appropriation for water quality testing in the Taku, Stikine, and Unuk River watersheds.

Reports

B.C. Auditor General

www.bcauditor.com/pubs/2016/audit-compliance-and-enforcement-mining-sector

Financial Assurances Report

https://d3n8a8pro7vhmx.cloudfront.net/ubcic/pages/1290/attachments/original/1463347826/Toward_Financial_Responsibility.pdf?1463347826

Mount Polley Independent Review

www.mountpolleyreviewpanel.ca/mount-polley-review-panel-delivers-final-report

Recent Media:

www.salmonbeyondborders.org/media

Letters from Industry and Municipal Leaders:

www.salmonbeyondborders.org/press-releases

www.salmonbeyondborders.org/resolutions--letters-of-support.html

Additional industry letters available upon request.

July 8, 2014

Commissioner Cora Campbell
1255 West 8th St.
P.O. Box 25526
Juneau, Alaska 99802-5526

Dear Cora:

Numerous groups and individuals in Southeast, including PVOA and ATA, have raised concerns about downstream fisheries and water quality impacts from existing and proposed mining projects in northwest British Columbia (BC). Many concerns have not been adequately addressed, particularly with regard to the proposed Kerr Sulphurets Mitchell Mine (KSM), slated for the headwaters of the Unuk River. We are hoping that the state will consider requesting a Panel Review of this project.

Canada provides for three levels of environmental review. In order of increasing rigorousness they are: Screening, Comprehensive, and Panel. KSM is currently undergoing a Comprehensive review, but there is some chance of elevating this to a Panel Review, particularly if it provides a way to better address Alaska concerns.

Although Alaska is involved in the KSM permitting workgroup, many of Alaska stakeholders' concerns have not been addressed, in part due to the nature of the permit review process Canada has selected. The Comprehensive Review process is fast, with tight deadlines and inadequate time to review and respond to proposals like KSM, which included over 35,000 pages of technical information. The Canadian permitting process has some significant differences when compared to Alaska's. For instance, it appears that many details, such as bonding, are not dealt with up front, but are instead negotiated by the agencies and the proponent after project approval.

Most importantly, the provincial and federal governments are under no obligation to address our concerns. A prime example where this is already been problematic for Alaska is the Tulsequah Chief mine, where Canada promised that longstanding acid mine drainage would be dealt with, yet it still continues.

Some of the unaddressed concerns about KSM include:

- Lack of bonding provisions for long-term water treatment, maintenance and monitoring of the tailings and waste rock dams, and any needed cleanup;
- Ensuring long-term stability of tailings and waste rock dams;
- Identification of the who and how's of clean up after accidents;
- Lack of adequate selenium treatment; and,
- The effects on the Nass River system from two tailings dams that could negatively impact salmon subject to the Pacific Salmon Treaty. These holding dams will have to be in place for perpetuity and the operator states the need 250 years of treatment and monitoring. Alaska's previous comments did not even address the issue of tailings, and conversations with DNR's Kyle Moselle indicate that he was unaware of the importance of the Nass River to Alaskan fishermen.

During the workgroup process Alaska obtained commitments from Canadian representatives to address water quantity issues, but it should be re-emphasized that Canada is currently under no legal obligation to follow through with any commitments made in the workgroup process. It might be wise for the state to more clearly document its concerns, and any commitments that were made, prior to the Canadian government permitting this project.

KSM and the slate of mining projects anticipated to be developed along the Alaska/BC border in the near term is of concern to many sectors of the public and industry in Southeast Alaska. We are working with commercial fishing, sport fishing, and tribal groups, as well as local businesses and environmental groups. We have taken our collective concerns to the AK congressional delegation, US federal agencies, and the International Joint Commission (IJC).

Fortunately, the delegation shares these concerns and has requested the State Department engage with Canada on the matter.

As mentioned above, one way for Alaska to help address local concerns, and also boost the delegations efforts, would be to more fully document the state's questions and concerns through a request for the enhanced Panel Review of the KSM mine proposal.

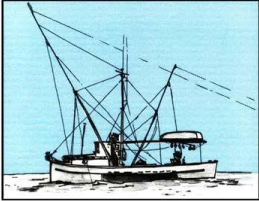
The Canadian federal review process for KSM is nearing its conclusion; a public comment period will begin on or about July 21. Given potential risks fish and wildlife and water quality on both sides of the border, and the concerns of Alaska stakeholders that stand to be affected by any negative impacts of the KSM mine, we respectfully ask that the State of Alaska submit comments and also request a Panel Review of the proposal.

Thank you for consideration of our request. We would be happy to meet with you and provide additional information or assistance.

Best regards,

Brian Lynch
Executive Director
Petersburg Vessel Owners Association

Dale Kelley
Executive Director
Alaska Trollers Association



Alaska Trollers Association

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October 21, 2013

Garrett Cooper, Project Manager
Canadian Environmental Assessment Agency
410-710 West Georgia Street
Vancouver, B.C. V7Y 1C6
Sent via email: KSM.Project@ceaa-acee.gc.ca

RE: Kerr-Sulphurets-Mitchell (KSM) Mine Proposal EIS

Dear Mr. Cooper:

The Alaska Trollers Association's (ATA) is concerned about the potential permitting of the large scale Kerr-Sulphurets-Mitchell Mine (KSM) in the Unuk River watershed. We offer these brief comments, but note that the comment period was far too short, and not well-timed, for those who could be negatively impacted by the KSM Mine.

ATA and other associations whose members may have concerns about this project had inadequate time to review the voluminous Environmental Assessment, because the comment period has been held during the heart of the fishing season. While hearings were conducted and obvious care was taken to discuss the project with select Canadian communities and tribal nations, there has been no outreach to the Alaskan fishing communities most likely to suffer the downstream effects of KSM mine.

ATA represents a fleet of commercial hook and line salmon fishermen who fish for Chinook, coho, and chum salmon off the coast of Southeast Alaska. There are over 2,000 troll permits and about half are fished each year. The Unuk River and its tributaries provide an important component of the season's harvest for our fleet and many others along the coast. The troll fleet is known for delivering fine quality salmon from nearly pristine watersheds. Our concerns with projects like KSM include protection of critical habitat and fish populations and market implications for Alaska seafood, which is widely recognized for its sustainability and wholesomeness. Healthy salmon equates to thousands of jobs each year for families in Alaska's coastal communities.

ATA works to sustain fisheries stocks and is an active participant in both state and federal resource management arenas and Pacific Salmon Treaty (Treaty) negotiations. The Treaty addresses issues relative to salmon stocks shared by fishermen from the US and Canada. Each country invests a tremendous amount of money and energy into protecting habitat, conducting research, and managing fisheries, domestically and under the auspices of the implementing body of the Treaty, the Pacific Salmon Commission. This commitment must be supported by sound habitat decisions, on each side of the border, to maintain a sustainable environment for fish and wildlife and those who live, work, and recreate in the region. Despite Unuk River stocks being subject to the Treaty, it appears that little work has been done to analyze the impact of KSM on these salmon or the fishermen that harvest them.

It is our understanding that the State of Alaska has been participating in a technical working group for at least one portion of the EA review, but to my knowledge this work has not yet been made available to the public. Our association's inability to muster the resources necessary to adequately analyze the full set of assessment documents, in addition to a short comment period, makes it exceedingly difficult to provide a proper set of comments.

It is shocking to think that a mine of this magnitude could sit at the headwaters of an important salmon watershed. At 130,000 tons of ore per day, for 55 or more years, this mine would dwarf the production seen at any of the mines we are familiar with in Alaska. To help put that into perspective, consider Green's Creek Mine near Juneau. The

recent expansion for tailings disposal made room for an additional 20 million tons of tailings and waste rock. This expansion is anticipated to increase the life of the mine by about 10 years. If I understand the proposal correctly, 20 million tons would take KSM contractors just 154 days to amass.

At the scale envisioned, the KSM mine is likely to have far reaching impacts. However, you also need to factor in the additive effect of related infrastructure and necessary land preparation. Couple that with the cumulative impacts of the numerous mine and development permits that are pending for the surrounding area. It's hard to imagine what all this will ultimately mean to the critical habitat that supports the region's bounty of fish. All anticipated and cumulative impacts must be analyzed.

KSM has detailed plans to carve up a portion of Mitchell Glacier should it not recede according to the mine's timeline. As fishermen, we see first-hand significant signs of climate change and, regardless the reasons, it's obvious that we are in a time of transition. Glaciers are crucial to the physical and biogeochemical make-up of our region's streams. Prompting early glacial recession and interfering with important nutrient, temperature, and water volume control mechanisms could have devastating effects on fish and wildlife populations.

A 1,000 year dam is envisioned for the containment of waste water from KSM, along with a treatment plan that will be needed for another 200 years after the mine is exhausted. Will this structure stay sound and withstand significant geophysical events? If the system design fails at one or multiple stages, is there a detailed back up plan to handle the sheer volume of water that KSM intends to process and store each day? Are there robust risk analyses and substantial liability coverage planned for treatment plants and the dam? What happens after 200 years?

History shows that mines change hands frequently and clean-up issues haunt most, if not all, states and countries that have permitted acidic mines of this scale. Who will be responsible for securing this site over time? Who is liable for future problems? Is there significant bonding attached to the project, or will Canadian's and Alaskan's be left holding the bag in the end?

Our members have far more questions than time to seek answers. So, setting environmental risk aside, why is this mine needed? It's obvious that speculators are interested, but while forecasts suggest demand will grow and boost copper prices, this metal has always been subject to boom and bust cycles and appears to be down about 9.7% in the current calendar year. With several other large scale mines about to start up in China and elsewhere, will the production at KSM be profitable and sustain jobs over time?

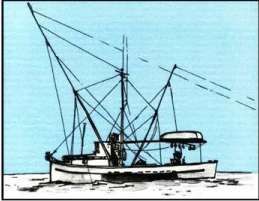
Many supporters point to substantial employment for communities near the mine. Alaskan's understand well the need for good paying jobs in small, often disconnected communities. What the caliber of KSM jobs will be is a question worth asking for Canadian's, since here in Alaska we've often find it difficult to find skilled labor locally and folks are brought in from outside. Again, we understand the quest for jobs, but urge you to also consider the array of possible outcomes that could result from the development envisioned here.

In Alaska, we rely on healthy salmon and other species of fish to fuel both our rural and urban communities. Commercial fishing is the largest private sector employer in Alaska. In Southeast Alaska there are well over 6,000 permit holders who provide revenue for the state, crew members and support sector businesses. Guided sportfishing contributes significantly to the jobs base, and sport fishing and subsistence/personal use fisheries are critical to Alaskan's sustenance and quality of life. Large scale development in sensitive terrestrial and marine habitats does not, on its face, seem conducive to productive ecosystems that feed our families and towns.

We encourage you to conduct a better analysis of downstream effects and more outreach with the affected public, no matter where they live, as you move forward in the decision process. It is our hope that the government of Canada will work closely with the State of Alaska and the United States government, to protect our natural resources and citizens of both countries from any ill-effects stemming from this project.

Best regards,

Dale Kelley
Executive Director



Alaska Trollers Association

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July 27, 2010

The Honorable Gordon Campbell PO Box 9041
Stn Prov Govt Victoria, BC V8W9E1 Fax 250 387-0087

Dear Premier Campbell:

It is Alaska Trollers Association's (ATA) understanding that the Trustees for Redfern Resources, Ltd. (Redfern) have requested a transfer of the Environmental Assessment Certificate MO2-01 for the Tulsequah Chief Project (Tulsequah) to Chieftain Metals (Chieftain).

Given the Transboundary nature of the Taku River watershed, and the significance of its bounty of fish and wildlife to both countries, we request that the Government of British Columbia postpone transfer of Certificate M02-01 to Chieftain, or any other potential buyer, pending a thorough review of both the company and the anticipated impacts of its plans to re-open the mine.

ATA has monitored the Tulsequah and participated in permitting and public hearings for many years. However, we were only recently advised of the pending transfer request. While it appears that the British Columbia Environmental Assessment Office is no longer soliciting comments on the transfer, ATA respectfully requests that this letter be incorporated into the record of decision.

The Alaska Trollers Association (ATA) represents commercial hook and line salmon fishermen in Alaska. The Taku River provides an important component of the season's harvest for our fleet and many others. As you know, Canadian fishermen also rely on salmon produced in the Taku River.

ATA is an active participant in both state and federal resource management arenas and Pacific Salmon Treaty negotiations relative to Transboundary Rivers. The US and Canada put a tremendous amount of money and energy into protecting habitat, researching salmon stocks, and managing fisheries, both domestically and under the auspices of the Pacific Salmon Commission. This commitment should be furthered through sound habitat decisions, on each side of the border, to maintain a sustainable environment for fish and wildlife and those who live, work, and recreate in the region.

Significant environmental, transportation, and financial questions have plagued the Tulsequah project. Most of those questions remain unresolved and are of concern to our members and fishermen of both countries, all who rely on a healthy and productive Taku River watershed.

The poor track record of previous Tulsequah contractors, along with an array of impractical and potentially harmful proposals, have heightened concerns about rejuvenating a large scale mine at the headwaters of the Taku River. Some of ATA's concerns include:

- Acidic mine drainage and metal leaching from the mine workings and waste materials is a longstanding problem that has yet to be resolved.
- Groundings of conventional barges and tugs have occurred under relatively good conditions, heightening concerns about industrial barging and potential harms to water quality and spawning and rearing habitat.
- There appears to be no body of research developing on changing climactic conditions we are

witnessing in the watershed, or how that could affect various transportation proposals.

- Sufficient bonding with assignment of liabilities, and an arm's length analysis of the company's emergency and mediation plans should be a matter of large concern to both countries. Does Chieftain have the financial wherewithal and commitment to adequately address, correct, and mitigate any damage done?

A series of letters from the state of Alaska and the US State Department was sent to the British Columbia Minister of the Environment and Environmental Assessment Office. To our knowledge, those letters have not yet been answered. ATA endorses those comments and would greatly appreciate receiving your responses when they become available. Additionally, we ask to be kept informed of your ongoing decision-making process. Hopefully those most affected will be given reasonable opportunities to weigh in. For the record, fishing season would not be considered reasonable to ATA.

In order to best serve the interests of residents on both sides of the border, ATA urges the government of British Columbia to work cooperatively with the State of Alaska and Taku River stakeholders on all outstanding issues and future proposals related to the Tulsequah. It is essential that a diligent review of Chieftain and its development and operational plans and anticipated impacts be part of that cooperative effort, before any permits are issued to a new Tulsequah contractor.

In conclusion, ATA requests your assistance to protect instream and shoreside habitat and water quality in the Taku River by using extreme caution when permitting mining or any other development activity in this vital watershed. Healthy and productive fisheries resources will continue to provide intrinsic value and economic opportunity for communities in both nations for many years to come.

If I can answer questions regarding ATA's position on this or other related issues, please don't hesitate to contact me.

Sincerely,

Dale Kelley
Executive Director