

Alaska State Legislature

Legislative Hearing

Canadian Mines on Transboundary Rivers

The Need for Financial Assurances

Brief

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March 16, 2017

Table of Contents

1. Introduction	3
2. Background	3
3. British Columbia’s Financial Assurances Regime	7
3.1 Reclamation Liability	8
3.2 Major or Catastrophic Event Liability	9
3.3 Province of BC Review and Response to Financial Assurance Program Shortcomings	11
4. The Risk Posed by British Columbia’s Current Approach to Financial Assurances	13
4.1 A Case Study in Underestimated and Underfunded Reclamation Requirements—Teck Resources	13
4.2 A Case Study of Unintended Pollution Events—Imperial Metal and Mount Polley’s Tailings Facility Breach	16
5. Conclusion	19

1. Introduction

This brief has been prepared in support of the Alaska State Legislative Hearing on House Joint Resolution 9 (HJR 9). Notwithstanding the recently signed Statement of Cooperation between the British Columbia and Alaska governments, the State of Alaska cannot rely upon the Province of British Columbia to adequately protect downstream interests threatened by upstream mining activity that has been, or will be, permitted and is regulated by the BC Ministry of Energy and Mines and the BC Ministry of Environment.

As recommended in HJR 9, the Canadian and US governments must work together to investigate the current and long-term impacts of mining in British Columbia and develop measures to ensure downstream resources are not harmed. In particular, a fulsome and effective financial assurances regime is needed in British Columbia to protect the environment, guarantee reclamation of mine sites, and in the event unintended major or catastrophic pollution occurs, ensure cleanup, remediation and financial compensation for those affected.

2. Background

One of the key features of any effective environmental protection regime is a method by which to ensure that the costs from pollution are borne by those who cause it. Often articulated as the **Polluter Pays Principle**, the idea is that since economic development is desirable and necessary, it must be undertaken in a sustainable manner that protects the environment from harm as well as protects the public from loss and cost.

When companies bear the cost of pollution arising from their commercial activity this not only serves the public interest, it enhances the sound working of the market economy, now and into the future. Placing the financial burden for environmental impact squarely on those who cause it provides clearer market signals about the net benefits from industrial activity and leads to better investment decisions and mine operating practices.

Once regulators adopt the Polluter Pays Principle financial mechanisms become necessary to ensure that when it comes time to pay, the polluter is able to do so. This is the underlying purpose of a financial assurances regime—to ensure that the polluter has the financial assets to fully meet its obligations when they come due.

Regulatory authorities allow a certain degree of environmental harm as a necessary part of the industrial development process. Mining companies are permitted to disrupt the environment if they agree to reclaim it. Financial assurances for reclamation then become a means by which to

ensure that reclamation will be undertaken. If the company fails to perform its obligation, financial assurances provide regulatory authorities with access to funds to undertake reclamation activities themselves.

The reliability of reclamation cost estimates as well as the degree to which the estimated reclamation liabilities are funded become features of a reclamation financial assurances regime that speak to the quality of the program. That is, a financial assurances regime that portends the successful achievement of the Polluter Pays Principle cannot have gaps built into its model whereby the public ends up footing the bill. Accurate reclamation estimates along with full funding of reclamation obligations closes the gap between lip service to a Polluter Pays Principle and its actualization.

Regulatory authorities are aware that unintended environmental pollution events from mine sites can and do occur despite best compliance and enforcement efforts to avoid them. This is why, as part of the permitting process, some environmental protection regimes require that companies prove that they have access to sufficient financial resources for clean-up, remediation and compensation if accidents happen.

A fulsome financial assurances regime for reclamation and unintended pollution events provides environmental protection benefits far in excess of ensuring cash is available to pay for damage done.

When companies are required to prove up front that they are fully capable of meeting their environmental impact obligations for reclamation and unintended environmental harm events:

1. companies are incentivized to adopt best available practices and best available technologies;
2. operators release less hazardous waste over the mine's life;
3. fewer accidents occur and the consequence of those that happen are reduced;
4. fewer bankruptcies occur; and
5. reclamation, clean-up, remediation and compensation is provided in a more timely and fulsome manner reducing ultimate harm and cost.

These additional benefits mean that financial assurances have an extremely important role to play in the broader goal of environmental protection. An effective financial assurances system protects the environment because it incentivizes pollution prevention. A robust financial assurances regime, therefore, is integral to any regulatory regime that seeks to protect the environment.

British Columbia's mining regulation framework recognizes both intended and unintended environmental harm. In both cases, the Polluter Pays Principle is enshrined in BC's legislative framework. Mine operators are required to bear the full cost of mine reclamation during the mine's life cycle as well as bear the full cost of cleanup, remediation and compensation for commercial losses when accidents occur.

In practice, however, this is often not the case. This is because there is little in BC's financial assurances regime to guarantee that reclamation estimates are accurate, that companies have the financial capacity to undertake reclamation when required, or that companies will have sufficient financial resources to respond to damage done when accidents occur.

In too many cases mining operators in BC have avoided all or part of their financial obligations for environmental harm because of the weaknesses built into BC's financial assurances regime. BC's subpar financial assurances framework not only puts the government's ability to protect the environment at serious risk, it has also placed an unfair burden of current and future costs onto the public.

The governments of the Province of British Columbia and the State of Alaska entered into a Memorandum of Understanding and Cooperation on November 25, 2015. On October 6, 2016, a Statement of Cooperation established a Bilateral Working Group on the protection of transboundary waters and the fishing they support.¹

The primary focus of the working group is on concerns related to the degradation of water resources from existing and proposed mines in BC that are located in the headwaters of shared Alaska-BC rivers. The scope of the group's work extends throughout the mines' life cycle which includes development, operations, facilities closure, and long term mine maintenance that in some instances may continue in perpetuity. There is nothing in the agreement that speaks to the need for an effective financial assurances regime in British Columbia as part of the environmental protection strategy or as a means to respond to losses incurred from a degradation of waterways now or in the future.

The Province of British Columbia's regulation of mining activity does not properly protect the public interest of British Columbians or Alaskans, nor does it protect the environment. It does not ensure adequate compensation for losses incurred when things go wrong. The regime is in need of reform despite public statements by the Minister of Energy and Mines, Bill Bennett, that reforms have been implemented.

Regulatory changes that the Province of British Columbia has recently introduced are woefully insufficient to address the lack of compliance and enforcement in mining regulation and there have been no changes to address the failures in the financial assurances regime. The risks to

¹ Appendix I to the Memorandum of Understanding and Cooperation between the State of Alaska and the Province of British Columbia, October 6, 2016, [Statement of Cooperation on Protection of Transboundary Waters](#).

the environment continue while the costs to the public mount under a false pretense that they have been addressed.

Meaningful enhancements to BC's financial assurances regime recommended by the BC Auditor General² and the Union of BC Indian Chiefs³ in reports published in 2016 have gone unheeded. Instead, the BC Ministry of Energy and Mines has endorsed a report on financial assurances it commissioned from consulting firm Ernst and Young (E&Y).⁴ If E&Y's recommendations are adopted by the Province of BC this will likely increase future environmental risk and increase the cost and loss borne by the public.

In the case of mines located at the headwaters of shared rivers, the burden of risk, loss and cost falls disproportionately on the land, water and people who live and work on the other side of the international border.

One of the first steps in addressing the undesirable imbalance between who bears the financial burden of activity from mines located in BC and who has the authority to mitigate it is to understand the financial assurances regime in BC and determine if it meets the standards of practice expected. This brief addresses these issues. In particular, this brief:

1. discusses the financial assurances regime in British Columbia;
2. highlights the degree to which BC's financial assurances regime does not protect transboundary waters and the fishing they support; and
3. recommends actions that could be taken to close the gaps between environmental protection goals and the practical reality.

The Bilateral Working Group's stated intent to protect transboundary waters is not achievable under British Columbia's current regulatory framework and its substandard financial assurances regime. The laudable intent of the Statement of Cooperation to protect transboundary waters and the fishing they support will be frustrated unless BC's financial assurances system is based on accurate reclamation estimates, requires full funding for these cost estimates and requires mine operators to prove access to adequate financial resources to fund response to, and compensate for, major and catastrophic pollution events.

² Auditor General of BC, "[An Audit of Compliance and Enforcement of the Mining Sector](#)", May 2016.

³ Union of BC Indian Chiefs (UBCIC), "[Toward Financial Responsibility in British Columbia's Mining Industry](#)", Robyn Allan, May 2016.

⁴ Ernst and Young, BC Ministry of Energy and Mines, "[Report and recommendations for BC's mine reclamation financial security policy](#)", February 2017.

Since the Province of British Columbia does not intend to address these matters, a call for the Canadian and US governments to work together to investigate the impacts of mining in British Columbia and develop measures to ensure downstream resources are not harmed is both timely and necessary.

3. British Columbia's Financial Assurances Regime

The financial assurances regime for mine site reclamation in British Columbia is inadequate because it does not accurately estimate mine reclamation obligations or require full-funding of reclamation liabilities at the time these obligations are permitted or when obligations are revised every five years as part of the life-cycle monitoring process.

A financial assurances regime to ensure mine owners have sufficient financial resources to pay for environmental damage and commercial losses from unintended mine accidents—such as tailings facilities breaches—is non-existent.

Two recent reports canvassed this issue. They include the BC Auditor General's "Audit of Compliance and Enforcement of the Mining Sector" and the Union of BC Indian Chiefs' "Toward Financial Responsibility in British Columbia's Mining Industry".

The reports drew similar conclusions regarding the inadequacy of BC's system of financial assurances and how this leads to increased risk exposure, increased harm to the environment and increased cost borne by the general public. These findings are in contrast to BC's stated goal of ensuring the polluter pays for the damage the polluter creates.

The UBCIC report recommended that in order to better protect the environment and the public:

1. full security be required to fund mine site reclamation costs;
2. financial assurances be introduced for unexpected environmental harm events;
3. an industry funded pool be established to provide funds for reclamation costs not met by mine operators and/or the costs and compensation related to unintended environmental accidents in the event mine operator required resources prove insufficient;
4. the establishment of a fair and fulsome claims settlement process; and

5. transparency and accountability in the preparation of reclamation cost estimates to ensure their reliability and provide proof that full security is required and posted.⁵

The BC Auditor General's report recommended that government safeguard taxpayers by:

1. ensuring the reclamation liability estimate is accurate and that the security held by government is sufficient to cover potential costs. (Recommendation 1.3 Security – adequate coverage); and
2. reviewing its security mechanisms to ensure taxpayers are safeguarded from the costs of an environmental disaster. (Recommendation 1.4 Security – catastrophic events).⁶

Despite ongoing and recent claims by British Columbian legislators that the province of BC has implemented actions to address the shortcomings in the province's financial assurances regime, recommendations related to financial assurances for both reclamation costs and unintended environmental harm costs have largely gone unheeded.

The recommendations contained in both the BC Auditor General's and UBCIC's reports are as relevant today as when the reports were released since the Province of BC has not acted upon them.

The Province of British Columbia's ineffective response to the systemic failures in mining regulation and its financial assurances regime has led to a recent call for a judicial inquiry prepared on behalf of the Fair Mining Collaborative. The request for a judicial inquiry has been endorsed by numerous First Nations and environmental organizations located throughout British Columbia.⁷

3.1 Reclamation Liability

The first order of business in any environmental protection program is to reasonably estimate the level of risk. Without accurate and reliable reclamation accounting, British Columbian residents—and their Alaskan neighbours—do not know the magnitude of the likely reclamation cost exposure. The Province of British Columbia is most remiss in its estimates of water treatment. In many instances reclamation plans do not include water treatment as part of the estimation exercise. There is no indication that the Province of BC

⁵ Union of BC Indian Chiefs (UBCIC), "[Toward Financial Responsibility in British Columbia's Mining Industry](#)", Robyn Allan, May 2016, page 6.

⁶ Auditor General of BC, "[An Audit of Compliance and Enforcement of the Mining Sector](#)", May 2016, page 12.

⁷ Environmental Law Centre, University of Victoria, Letter to Premier Christy Clark, Request for Establishment of a Judicial Commission of Public Inquiry to Rectify and Improve BC Mining Regulation and report, "[Fixing Systemic Failures in BC's Mining Regulation: The Urgent Need for a Judicial Inquiry](#)", March 8, 2017

intends to improve its approach to its reclamation estimation procedure in a meaningful manner.

Not only are reclamation liabilities generally underestimated, the province also intends to continue its practice of allowing many mine operators to provide only partial security for these underestimated liabilities. In most instances, the province intends to wait until the mine is near the end of its useful life to require that a mining operator post full funding for reclamation.

Waiting until the financial benefits from mining activities are near the end of their useful life is the wrong time to require financial security—this is the very point in the life cycle where a mine is least likely to be able to provide such financial assurance. Such a practice provides an incentive to the mining operator to seek bankruptcy protection to avoid such costs, externalizing the burden onto the public in the process. The practical reality in BC is that when a company seeks bankruptcy protection, reclamation efforts generally move into a state of limbo.

3.2 Major or Catastrophic Event Liability

The Province of BC has not taken any steps toward ensuring that mining operators have adequate access to financial resources in the event of a major or catastrophic event.

The fact that the Province of BC has ignored mandatory financial assurances in the event of unintended environmental harm, such as a tailings facility breach, is surprising given that the province is aware that a Mount Polley type of catastrophe is expected to occur twice each decade. The Independent Expert Engineer's investigation determined that unless half of BC's 123 tailings facilities are decommissioned, two such tailings breaches are likely to occur each decade.⁸ The Province of BC has not taken any steps toward designing the recommended decommission plan, but continues to approve mine projects that rely on wet tailings storage. British Columbia is adding to the risk of future storage facility failures.

The fact that the Province of BC has ignored the introduction of mandatory financial assurances in the event of unintended environmental harm is also surprising given that the Province relies upon, and promotes, such mechanisms for protecting BC's natural resources in other areas of industrial activity.

⁸ Independent Expert Engineering investigation and Review Panel, [“Report on Mount Polley Tailings Storage Facility Breach, Appendix I”](#), January 30, 2015.

For example, Canada's Pipeline Safety Act requires that a minimum of \$1 billion in financial assurances be provided by companies in the event of a spill from crude oil transported along interprovincial pipelines.⁹ During environmental assessment and project permitting the National Energy Board (the federal regulator) has the ability to increase the mandatory amount based on the perceived risk of the project.

The Province of BC recently approved the expansion of the Trans Mountain pipeline system by relying, in part, on the protection mandatory financial assurances required in the Pipeline Safety Act afford land, water and communities in the event of an unintended spill. In contrast, the Province has not seen fit to extend such financial protection to the public if such a toxic spill event occurs from a tailings facility instead of a pipeline.

This inconsistent treatment of pipeline spills as compared to mining related spills not only creates a gap in the fulfillment of the Polluter Pays Principle, it treats two toxic spill events differently depending upon the source of the damage. This is not prudent policy or practice. Prudent environmental protection regulation would treat the need for financial assurances related to a toxic spill the same regardless of how the toxic spill occurs.

Another example of financial assurance protection for unintended pollution events exists in the international liability and compensation regime for spill events related to the marine transport of crude oil. Canada is a signatory to the international program and through the International Oil Pollution Fund (IOPF) \$1.3 billion CDN is guaranteed to be immediately available to respond to, clean-up and compensate for commercial losses related to spill events caused by the marine transport of crude oil.¹⁰

Both the Pipeline Safety Act and the IOPF financial assurance systems have mechanisms that provide additional funding from industry if losses caused by an accident exceed the funds that are readily available. The industry must make good on financial obligations related to pollution caused by their peers so this cost does not fall to the public instead.

⁹ [Toward Financial Responsibility in British Columbia's Mining Industry](#), Op. Cit., pages 82-84, pages 24-26 and page 79.

¹⁰ *Ibid.*, page 79-84.

3.3 Province of BC Review and Response to Financial Assurance Program Shortcomings

In response to public critique of BC's financial assurances system, the government of BC commissioned two reports. Neither report addressed the accuracy and reliability of reclamation estimates or the need for financial assurances related to unintended pollution events. The Province of BC claims to have responded to issues raised, but these claims are disingenuous.¹¹ The most important issues--accuracy of estimates and mandatory requirement for financial assurances related to pollution events--were left outside the scope of the Province of BC's review.

The first report commissioned by the Province of BC was prepared by Stantec Consulting Ltd. The report reviews a limited selection of reclamation financial assurances for reclamation models in other jurisdictions and compares these to the features of British Columbia's.¹² Although Stantec included Alaska's system—a system that undertakes more rigorous estimation of reclamation obligations than BC and requires full reclamation security at time of estimation—Stantec failed to include a discussion of the Quebec system (another Canadian province with significant mining activity) which has a full security requirement similar to Alaska's. The Stantec report provides an imbalanced impression of best practices applied in Canadian financial assurances systems. Such a limited view is relied upon by the Province of BC to support a continuance of BC's flawed regime.

The second report commissioned by the Province of BC was prepared by consulting firm Ernst and Young (E&Y).¹³ The scope of the terms of reference of the report limited the report's review to an evaluation of the financial assurances system BC has in place for reclamation and whether the approach is appropriate.

It is important to note that BC's current regime applies an ad-hoc risk-based approach to BC's financial security program for reclamation in order to justify its determination that some mine operators only need provide partial security for their reclamation obligations.

¹¹ [Government Actions Renew BC as Leader in Mining](#), February 28, 2017, Mine Reclamation Securities: update and next steps.

¹² Stantec Consulting Ltd., "[Policy and Process Review for Mine Reclamation Security](#)", September 2016.

¹³ Ernst and Young, BC Ministry of Energy and Mines, "[Report and recommendations for BC's mine reclamation financial security policy](#)", February 2017.

A similar risk-based approach was followed in the Canadian government's regulation of rail companies. When a rail car exploded in Lac-Mégantic, Quebec, killing 47 people, Canada's ineffective and underfunded hazardous spill regime for train transport accidents was exposed. The polluter--in this case Montreal Maine and Atlantic Railroad--was required by legislation to pay, but mechanisms were not securely established to ensure they could, or would. Montreal Maine filed for bankruptcy and taxpayers have borne the burden of more than \$155 million in claims costs.¹⁴ Mandatory proof of financial resources for all railway companies have since been introduced because a risk-based assessment approach does not protect the public.

The E&Y report determined BC's risk-based assessment approach--which allows under-funding of reclamation obligations--is adequate, despite the Auditor General's and the Union of BC Indian Chief's warnings to the contrary and despite recent evidence that this approach does not protect the public or environment from loss and cost. E&Y recommended in its report that the Province of BC continue its substandard policy and "formalize its risk management framework for mine securities."¹⁵

Not only does the E&Y report endorse BC's fundamentally flawed approach, there is a recommendation in the E&Y report that will lead to an increased downward bias in reclamation estimates.¹⁶ This is because E&Y proposes that the province increase the discount rate it relies upon for calculating each company's stream of future reclamation costs. As the discount rate rises, the stated present value of a given reclamation estimate falls. E&Y's suggested amendment to the calculation of the reclamation estimate is diametrically opposed to the stated objectives of BC's environmental protection philosophy and the interests of people on both sides of the Canada/US border.

The Province of BC's response to recent critique of its financial assurances framework as outlined above is little more than an exercise in public relations and illustrates the folly in trusting the Province of BC to address the failures in its financial assurances system. Under the current system, the Province of BC is not able to protect provincial or transboundary waterways from harm or the public from undue loss and cost.

¹⁴ Transport Canada, [Support for the people of Lac-Mégantic](#), December 21, 2015.

¹⁵ ["Report and recommendations for BC's mine reclamation financial security policy"](#), Op. Cit., page 4.

¹⁶ *Ibid.*, page 23.

4. The Risk Posed by British Columbia's Current Approach to Financial Assurances

In summary, the most serious risks to the environment, communities and people downstream of mine operations comes from:

1. underestimation of requisite reclamation activity, particularly the exclusion of long-term water treatment;
2. underfunding of reclamation costs that are estimated; and
3. lack of financial resources available to clean-up, remediate and provide compensation when unintended events occur.

Examples are provided below to assist in quantifying the extent of the gap between an effective Polluter Pays regime and BCs regime. These examples include:

1. an examination of reclamation estimates approved by the BC government for Teck Resources' mines in BC compared to the approach Alaska has adopted for Teck's Red Dog Mine. This example provides an illustration of the extent to which underestimation and underfunding exists; and
2. an examination of the Mount Polley breach to illustrate the lack of available financial resources and the extent of taxpayer burden when an unintended pollution event takes place.

4.1 A Case Study in Underestimated and Underfunded Reclamation Requirements—Teck Resources

Teck operates mines in both British Columbia and Alaska. In Alaska, Teck is responsible for the reclamation plans and obligations related to the Red Dog Mine, whereas in BC, Teck is responsible for the reclamation for 6 operating and 7 non-operating mines.

The province of BC estimates Teck's reclamation liability obligations at \$1.4 billionCDN. This estimate excludes significant requirements related to ongoing water treatment and therefore underestimates Teck's liabilities in perpetuity.

For example, Teck's estimated liability does not include all water treatment obligations in the Elk Valley Teck agreed to undertake as part of the Area-Based Management Plan—a plan that was drawn up as a result of transboundary concerns with the State of Montana because of selenium leaching into shared waters. Teck has promised to build 6 water treatment facilities in 9 phases between 2014-2032 but full accounting of these obligations and financial assurances to back them up have not been required. The capital cost for the first five years of the plan—and only two of the 6 treatment facilities—is \$600 million.

After Teck has mined the coal and distributed the benefits from its operations to its shareholders, there is little leverage available to the province of BC to enforce water treatment. This lack of leverage to enforce water treatment exists for any mine where the water treatment obligations are anticipated but not fully or properly estimated in reclamation plans and the mine operator is not required to fully fund such obligations, such as is the case with Tulsequah Chief.

In contrast, Teck's Red Dog Mine in Alaska is expected to require water treatment in perpetuity after the mine has finished its useful life in 2030.¹⁷ Full security for reclamation and water treatment to protect downstream resources is required in the State of Alaska, but is not required in BC. Reclamation estimation is undertaken in a more rigorous manner in Alaska and full documentation is available to the public. In addition the public has an opportunity to comment on reclamation plans and estimates. Full access to information and opportunity to critique reclamation estimates is not available in BC.

Since the Chief Inspector of Mines has required the company post security of only \$510 millionCDN for the \$1.4 billionCDN liability estimate it has accepted, this leaves \$869 millionCDN of unfunded liability—an unfunded liability of 63% as compared to 100% full funding on a larger estimated liability as would be required by the State of Alaska.¹⁸

¹⁷ [Reclamation and Closure Plan](#), Red Dog Mine, SRK Consulting prepared for Teck Alaska Incorporated, August 2016.

¹⁸ British Columbia, Ministry of Energy and Mines, [Annual Report of the Chief Inspector of Mines](#), 2015, page 36 - 39.

Teck has filed an irrevocable letter of credit (bond) with Alaska for reclamation obligations related to its one mine in the amount of \$558 millionUS¹⁹ while the company has been required to post only about \$510 millionCDN related to 13 mine facilities in BC.

It is important to note that there are no legislative or regulatory amendments required to ensure reclamation cost estimates are more accurate and incorporate potential water treatment obligations, or that reclamation costs for mines located in BC be fully funded. Enhanced estimation and immediate and ongoing full funding of reclamation obligations is at the discretion of BC's Chief Inspector of Mines. The Chief Inspector could require that all mining reclamation plans for mines located in proximity to shared international waters be fully funded.

More robust estimation and full funding of reclamation liabilities is an easily attainable goal in BC—it simply requires a government policy decision for it to occur.

Not only does the Province of BC's failure to accurately and reliably evaluate the need and cost of water treatment obligations put fresh water and ecosystems at risk, it creates a playing field that is not level among neighbouring jurisdictions.

The differing approaches between BC and Alaska incentivizes different corporate behaviours and is not in the interests of a well functioning market or in the interests of well managed international trade and commerce relations.

When mine operations in both BC and Alaska have the potential to impact waterways and the fishing they support, It is inappropriate for the reclamation estimation and funding process in one jurisdiction to be so fundamentally superior to that followed by the other jurisdiction. Whether Red Dog Mine operates in BC or Alaska should have no impact on the integrity of the reclamation plans or the likelihood that the costs will be paid when they come due. If Red Dog were located in BC, the estimated reclamation obligations and related funding requirements would be substantially lower than those required in Alaska for the same activity. The substandard approach in BC increases risk to the environment and the likelihood of public loss and cost.

In an effort to accommodate the needs of business over the needs of the environment and public, the current British Columbia government has granted special approvals to mining

¹⁹ State of Alaska, Department of Natural Resources, [Mining Reclamation Bond](#), October 4, 2016.

operators such as Teck and can be expected to continue this inappropriate practice for mines in BC in the future.

The tendency to favour business interests over environmental interests led the BC Auditor General to raise serious concerns about conflicts of interest within the Ministry of Energy and Mines and the potential for the regulator to become captured by the industry it is supposed to regulate. For example, Teck was granted provincial Cabinet approval for a permit to expand its Line Creek coal mine. That permit allows an increase in selenium discharge five times the level recommended in provincial guidelines.²⁰

Ministry of Environment staff advised the BC government that issuing a permit under such discharge conditions would likely not be protective of the environment. Department of Environment staff advised government that it could not approve a permit on that basis. In an unprecedented action, the British Columbia Cabinet invoked Section 137 of the Environmental Management Act to approve the permit for Line Creek's expansion. The risks from such a significant increase in selenium discharge, and the rationale for approval, have not been disclosed to the public. The BC Auditor General recommended that the government do so, but the government has refused.

4.2 A Case Study of Unintended Pollution Events—Imperial Metal and Mount Polley's Tailings Facility Breach

Imperial Metals is the second largest mine operator in the province of BC, second only to Teck Resources. Imperial Metals operates two copper mines—Mount Polley and Red Chris. It is a 50% of Huckleberry which entered care and maintenance in 2016. Imperial Metals is also a 50% owner of Ruddock Creek which is currently in development.

In 2014 the reclamation liability estimate for Mount Polley was \$25.9 millionCDN with \$10.5 millionCDN unfunded. For 2015 Mount Polley's reclamation liability increased to \$35.4 million and yet the unfunded liability amount rose to \$11.7 millionCDN. This means that although the province of BC knows that Imperial Metals operates a facility that should not have failed (which reflects poorly on the company's practices and procedures), and that the cost of future reclamation has increased partly due to the damage created by the breach, regulators have somehow concluded that the company's operations are less risky. This is

²⁰ ["An Audit of Compliance and Enforcement of the Mining Sector"](#), Op. Cit., page 100.

reflected in the fact that the Province of BC has reduced the percentage of security the company must post against its future reclamation costs.

On August 3, 2014, the 40-metre-high tailing dam at Imperial Metals' Mount Polley mine failed. Twenty-five million cubic metres of toxic wastewater and construction materials spewed into Polley Lake, Hazeltine Creek and eventually Quesnel Lake. Within the year much of the affected forest would be dead.

Two days after the spill, the BC ministries of Environment and Energy and Mines promised the response to the spill would be thorough, that health and safety would be protected and that the "cost of the cleanup of the breach is the responsibility of Imperial Metals, and is not a cost borne by B.C. taxpayers." Two days after that, BC Environment Minister Polak said: "We have a polluter-pay model in British Columbia and we expect the company will be the one paying for the cleanup and recovery."²¹

But B.C. does not have an enforceable polluter-pay model. Mining companies are not required to prove in advance that they have the insurance or other financial resources to pay for damage they cause. And if they are unable to pay, there is no industry-funded pool to fill the gap.

In the case of Mount Polley, which is operated by one of the largest mining companies in BC, the company was profitable before the event and therefore had positive cash flow, had access to the deep pockets of two large investors, and held some business interruption and pollution liability insurance. However, BC taxpayers have ended up on the hook for a substantial portion of the \$67.4 millionCDN in cleanup costs. Taxpayer funded refunds for expenses Imperial Metals incurred related to its response have meant more than \$23.6 millionCDN returned to the company, and unrecovered BC government (taxpayer funded) response expenditures of more than \$14 millionCDN have been incurred.²²

Not only are cleanup costs subsidized by the public purse, the land and waterways downstream of the tailings facility have, effectively, become Imperial Metals' new, more natural version, of a toxic waste impoundment area. The sludge will never be reclaimed and returned for storage in its former facility.

²¹ Vancouver Sun, Robyn Allan, [Mount Polley Cleanup Heavily Taxpayer Subsidized](#), August 3, 2016.

²² Email correspondence with the Ministry of Environment of unrecovered costs to March 2017.

None of these concerns address the needs of communities, local businesses and individuals that have not been compensated for commercial claims or reduced land values because of the spill. The claims mechanism whereby Imperial Metals responds to and determines compensation for those who have suffered financial loss is unfair and inefficient. Those who have suffered losses must file their claims with Imperial Metals which is not an arm's length, disinterested third-party. For many small business operators, proof of loss is a difficult and time consuming activity. When legitimate claims for compensation are refused, the only access is to the courts, which is a timely and expensive proposition leaving many impacted parties without proper redress.

Instead of heeding the recommendations in the Expert Engineers report that half of the province of BC's 123 facilities be decommissioned to ensure that tailings dams failures like Mount Polley's be avoided in the future, the BC government has not only ignored the recommendation, it continues to approve such facilities in new mine permits.

There remain many outstanding questions as to whether the cleanup and remediation plans approved by the province of BC have been driven by prudent environmental standards or have been driven by Imperial Metals' financial constraints. Within weeks of the event Imperial Metals booked its anticipated cleanup, remediation and compensation costs related to the event at \$67.4 millionCDN. That estimate has not been altered since. It is unusual for response and compensation costs for such a major event to be unvaried over the time horizon of cleanup, remediation and claims settlement.

There are two major lessons to be learned from the Mount Polley catastrophe.

The first is that access to adequate financial resources for responding to unintended pollution events should not be left to the discretion of mining companies. The majority of these companies do not sufficient financial resources to respond to their obligations and for mines close to the end of their life, under care and maintenance or closed, there is a significant incentive for the mine company to seek bankruptcy protection to avoid the costs of an unexpected pollution event.

The second lesson is that if the risk and potential cost of unintended events is assessed by an independent party prior to events taking place, clean-up, remediation and compensation will not be left to limitations imposed by the financial resources a company has access to, but will reflect predetermined standards for response and compensation. Certainly this is the standard of practice for a number of other potential pollution events such as those that may

occur from the failure of an interprovincial pipeline, a tanker spill, or rail car explosion. There is no reason such a standard of financial assurances should not exist for a mine site.

5. Conclusion

It is imperative that if transboundary waterways are to be protected that a comprehensive financial assurances program be introduced in British Columbia. Such a program needs to include:

1. the development of accurate reclamation estimates that include water treatment;
2. transparency and accountability in the preparation of reclamation cost estimates along with an opportunity for public review and comment of the proposed plan and costs;
3. full security posted to fund reclamation costs at time of permit;
4. financial assurances for unexpected environmental harm events for all mines (closed and operating) based on an independent risk assessment;
5. an industry funded pool for reclamation costs not met by mine operators and/or the costs and compensation related to unintended environmental accidents in the event the required mine operator financial assurances are insufficient; and
6. the establishment of a fair and fulsome claims settlement process.

The Province of British Columbia refuses to assume responsibility to adequately protect downstream interests threatened by upstream mining activity by introducing much needed reforms to the regulation of mining activities in the Province, particularly as they relate to the introduction of a fulsome and effective financial assurances regime. Therefore, House Joint Resolution 9 requesting that the Canadian and US governments work together to investigate the current and long-term impacts of mining in British Columbia and develop measures to ensure downstream resources are not harmed, is timely and necessary.