

Mount Polley's Sister Mine: We Must Do This One Right

Red Chris mine is expected to yield a vast fortune. But how to insure against another catastrophe?

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Kluea and Todagin Lakes, immediately downstream of the proposed tailings facility of Imperial Metals' Red Chris mine. Photo: Copyright Carr Clifton.

The highest levels of corporate integrity and responsibility should be the standard for any new mine in Canada, and especially for one with as much potential as Imperial Metals' Red Chris project, situated at the heart of the Sacred Headwaters in remote northwestern British Columbia. Imperial Metals has acknowledged that all exploration, regulation and construction costs will be reclaimed within two years of the mine's anticipated three decades of active production.

If true this immense and certain profitability ought to allow both the company and the government to push the limits of excellence on every front, assuring the public at every step in the process that costs and/or expediency will never deflect them from their goal of building an exemplary mine. It is in the interests of all of the mining industry and both federal and provincial governments that such high standards be set for Red Chris. Civic and corporate responsibility aside, self-interest alone would suggest that Imperial ought to build a great mine.

Consider the optics of Imperial's immediate dilemma. Todagin Mountain, site of the Red Chris mine, is home to the largest concentration of stone sheep in the world, a resident population that attracts remarkable numbers of predators. A wildlife sanctuary in the sky, the massif looks west to Edziza, sacred mountain of the Tahltan; north to the Grand Canyon of the Stikine, internationally known as the K2 of white water challenges; east to the Sacred Headwaters, birthplace of the Stikine, Skeena and Nass Rivers; and beyond to the Spatsizi, widely recognized as the Serengeti of Canada.

Building an open pit mine on Todagin, which overlooks the nine pristine lakes of the Iskut/Stikine headwaters, is the height of industrial audacity, seen by many as being as ill-conceived a gesture as drilling for oil in the Sistine Chapel. In time it may well be considered an act of folly comparable to the building of the Glen Canyon dam on the Colorado River, today widely viewed by all sides of the political spectrum in the United States as having been an egregious public policy decision.

Changing prospects in the region

There are other issues to concern the provincial government. The construction of the Northwest Transmission Line (NTL), the extension of the provincial power grid without which Red Chris could not be developed, perhaps made sense in 2006 when there were five major industrial projects being proposed for the remote region. But since then the global economy has endured the worst blow since the Great Depression. In 2012 Shell Canada withdrew from its much anticipated coal bed methane development in the Klappan. The promising and highly promoted Galore Creek copper and gold project imploded due to fiscal challenges and uncertainties. Fortune's play for anthracite in the Sacred Headwaters has very weak legs, especially in the wake of the recent Supreme Court's Tsilhqot'in decision; the Tahltan are universally opposed to the project.

AltaGas's run of the river hydro project at Forrest Kerr is a going concern. But the public will be hard pressed to understand why well over \$700 million of public funds were spent to extend the provincial grid to facilitate a private power company's efforts to sell back electricity to the state. People are especially uneasy to learn that \$130 million of this initial funding came from the federal Green Infrastructure Fund, money set aside by Parliament ostensibly to "green" our national economy. The official rationale for the inclusion of these funds was the government's desire to get 350 Tahltan people at the small community of Iskut off of diesel to reduce their carbon footprint, albeit at a per resident cost of close to \$400,000. This will surely be difficult to

sell to anyone, let alone a skeptical public, especially for a government that prides itself on fiscal responsibility.

The Mount Polley factor

If the optics of Red Chris were poor before the Mount Polley disaster, the public perception now is truly dreadful. Red Chris would not be feasible without the extension of the power grid to Bob Quinn Lake, in total an \$886-million expenditure that appears increasingly as a public subsidy for a single mine. In the construction of the power line right-of-way, the equivalent of 14,000 logging trucks of wood were simply burned rather than brought to market, making a mockery of the government's announced goal of reducing Iskut's carbon footprint.

It has also been widely reported that only the personal support and investment of Murray Edwards, owner of the Calgary Flames and Canada's 18th richest man, has allowed Imperial to stay afloat. In the immediate wake of the Mount Polley disaster, he and Imperial's second largest shareholder, Fairholme Capital Management, which together own 53 per cent of Imperial (although the lion's share is held by Edwards and his various financial entities), offered an emergency infusion of \$100 million, an investment that held off bankruptcy. For Edwards to have willingly increased his stake in Imperial, even as the company copes with the Mount Polley disaster, suggests that he must have great faith in the value and long-term economic potential of the Red Chris mine.

On the eve of the recent provincial election, with the Liberals clearly behind in the polls, Edwards hosted a private dinner for Premier Christy Clark at the Calgary Petroleum Club in Alberta that brought in \$1 million for her campaign. Nothing illegal in this, but it is hardly something to reassure the British Columbian public, given that Red Chris is at least for the moment the only industrial project aside from Forrest Kerr to benefit from construction of the NTL.

Then comes Mount Polley. The provincial government and Imperial made a major mistake by not immediately taking responsibility for what anyone with access to the Internet could see was a major disaster. Imperial waited 24 hours to make a public statement. Company president Brian Kynoch offered to drink the water from the slurry as soon as the "solids come out." Imperial described the collapse of the dam as a "breach" when everyone could [see on YouTube](#) that it was a complete structural failure. To refer to the material pouring out of the reservoir as simple sands and sediments, and to suggest that the water was safe to drink, belied what people could readily see online -- a massive slurry of toxic sludge roaring downstream toward one of the most celebrated deep water salmon lakes in the world, the place of origin of fully a quarter of the Fraser River run, which in 2014 was anticipated to be the largest return in the history of British Columbia.

In point of fact the dam failure at Imperial Metals' Mount Polley mine resulted in the discharge of 10 billion litres of industrial water and 4.5 million cubic metres of solid materials tainted with heavy metals. That's enough water to fill 2000 Olympic-sized swimming pools; enough waste to

cover all of Vancouver's Stanley Park with a metre of toxic sludge. In 2013 alone Imperial discharged into its Mount Polley containment pond 406,122 kilograms of arsenic, 177,041 kilograms of lead and 3,114 kilograms of mercury. What possibly possessed Bill Bennett, minister of energy and mines, to compare the disaster to one of the thousands of snow avalanches that occur in the province every winter?



The massive failure of Mount Polley's tailings pond dam, owned and administered by the same company behind Red Chris mine in the Sacred Headwaters, has created a crisis of confidence about the safety of Red Chris that opens an opportunity to do the project correctly.

There is yet another serious concern. By good fortune the deposit at Mount Polley is highly unusual in being alkaline with relatively low levels of sulphide minerals. Most similar deposits are high in sulphide minerals which make their tailings much more acidic, and in the event of leakage or structural failure, harmful to aquatic life. In its first two decades of operation Red Chris will generate 192 million tonnes of waste rock, of which 86 per cent will have to be managed as being Potentially Acid Generating (PAG). Another 51 million tonnes of ultra low-grade ore will also be treated as PAG, as will the 83 million tonnes of low-grade ore that will be stockpiled during the first decade of operations and later reclaimed and milled in years 11 through 18. Should a failure occur at Red Chris similar to what happened at Mount Polley, the consequences could well be far more serious.

The Mount Polley disaster compounded mistrust of Imperial Metals in the Iskut valley at the foot of Todagin, mistrust that had grown from a series of quite unnecessary and unhelpful

decisions and actions taken by the company's people on the ground. The disastrous tailings pond breach only makes things worse.

The Iskut elders blockaded the Red Chris project for one simple reason. They believe that Imperial misled them, offering false assurances as to the safety of the proposed mine on Todagin. In a public forum and in private meetings they were told by Imperial that the tailings facility at Red Chris would be completely safe, precisely because it was being built to the design and engineering specifications of Mount Polley. They were assured that Mount Polley could never fail.

Then they saw what happened, as did all Canadians. They heard media reports that employees at Mount Polley had quit high-paying jobs because management refused to listen to their concerns about the safety and integrity of the dam. They learned that independent consultants hired by Imperial had expressed similar concerns only to be ignored. They learned too that the insurance policies held by the company were insufficient to cover the costs of the cleanup. Imperial's coverage is a mere \$15 million; the cleanup of the two most recent major tailings pond failures comparable to that of Mount Polley, at the Aznalcóllar mine in Spain in 1998 and at Kingston in Tennessee in 2008 cost \$350 million and \$600 million, respectively.

The Iskut elders also know that the facility being built today on Red Chris, like that of Mount Polley, has no liner, a cost saving decision that in the wake of Mount Polley seems negligent and parsimonious in the extreme. They know too that below the Red Chris site lie the nine incomparably beautiful lakes of the Iskut headwaters, among the best trout fisheries in the country. They were shocked to read Imperial press releases issued in the immediate wake of the disaster stating that nothing would impede the construction of the Red Chris mine. The company's first reaction was not to reach out to the public, but rather to reassure the markets.

An opportunity to do it right

In short there is only one way out for Imperial and the Clark government -- integrity and transparency, and a sincere apology backed by a firm financial commitment to do everything possible to make Red Chris the safest and most ecologically benign mine ever constructed. Tahltan employees must be treated with respect. Training programs need to be implemented. Imperial must lead with technical and engineering innovations that however costly will reassure the public and guarantee safety at the site.

Second, Imperial needs to come clean as to its long-term plans for the mine. Permits to date have been issued based on a projected production of 30,000 tonnes of rock a day for some thirty years. Yet in messages to its stockholders Imperial flaunts plans to increase production five fold to 150,000 tonnes a day once the mine is up and running. This would imply a mine of a scale vastly larger than the one originally proposed to the community and currently approved by the provincial environmental assessment process.

To date Imperial has seemed largely deaf to public concerns. To cite but one example, the plans for Imperial's transmission line from Bob Quinn to Tatogga Lake called for a narrow band of forest to be left standing along the roadside, "leave strips" that would insulate the Stewart-Cassiar, one of the most scenic highways in the province, from the industrial right of way. Imperial failed to honour this obligation, choosing instead to clear the forest to the very edge of the highway. Explaining the oversight to a stunned government inspector, Imperial cited "contractor error." A simple gesture of leaving 20-30 metres of standing trees would have mitigated the visual impact on those who travel or live along that highway. Imperial must act differently, must do far better, if it is to recover from what is at the moment a major public relations disaster both for the company, the mining industry and the Liberal government.

The Red Chris mine is going to happen. The deposit is significant and Murray Edwards' financial commitment is solid. Once a project is certain to go the question is not if but how. We are at this point with Red Chris so we must work together to ensure that the mine will be an industrial jewel, that its rewards will be shared with the Tahltan people and that the sacrifice of this mountain will somehow yield for all Canadians benefits as substantial as those that I have accrued over the last 35 years whenever I have walked the flanks of Todagin and watched the eyes of children fill with wonder as they encounter stone sheep and grizzly, wolf and wolverine, black bear and mountain goat.

Above all there must never be a repeat of the Mount Polley mining disaster. 🌱

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