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Knowledge Makers

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Negligence, Failure, Irreparable Damage: An Analysis of Provincial and Federal Jurisprudence  
within the Mount Polley Mine Disaster

**Relation**

*Weytkp xwewéytp, Jacob Boisclair ren skwekwst, te Kamloops te Secwepemcúl'ecw re  
st7' é7kwen.*

Hello, my name is Jacob Boisclair; I am from Kamloops in the territories of the Secwepemc Nation.

I was born and raised in Kamloops, a small city located on the unceded territories of the TK'emlups te Secwepemc. Growing up here, I spent countless hours in surrounding forests, lakes, rivers, and hillsides, which engraved in me a deep sense of appreciation, respect, and relation with this land. As a Metis scholar and guest upon this land, I am incredibly grateful to be able to study, work, play, and participate with this land. With this in mind, I intend for my work and studies to provide actionable change, rather than to be inert. To this end, the following paper details the events and lives of those involved with the Mount Polley Mine disaster, and how they were affected.

**Overview**

The Mount Polley Mine Disaster occurred in 2014, wherein the tailings pond dam failed and resulted in about 24 million cubic meters of contaminated materials to spill into Quesnel Lake, Hazeltine Creek, and Polley Lake (Meissner 2019). The broad scope of ecological effects from this disaster are still being felt today. For context, “The collapse of the Mount Polley

tailings pond dam destroyed or permanently affected more than 2.6 million square meters of aquatic and riparian habitat” (Lavoie 2016, para. 5). The Mount Polley mine disaster, which occurred on August 4, 2014, was one of the largest environmental disasters in Canadian history. The tailings dam at the mine site breached, releasing millions of cubic meters of mine waste and tailings into nearby waterways, including Quesnel Lake. This disaster had devastating consequences for local ecosystems and the Indigenous communities that rely on the area's natural resources for their livelihoods. In this essay, I will explore the causes of the Mount Polley mine disaster, its environmental and social impacts, the response of the Canadian government and mining industry, and ongoing efforts to prevent future disasters. The exact cause of the Mount Polley mine disaster is still a subject of debate. However, investigations by the British Columbia government and independent experts have identified several factors that may have contributed to the failure of the tailings dam. These include inadequate dam design and construction, inadequate water management, and insufficient monitoring and oversight by government regulators (Lavoie 2016). Imperial Metals also built on unstable foundation materials, which made it more vulnerable to failure (Lavoie 2016).

### **Nations Affected**

The ?Esdilagh First Nation, Lhtako Dene First Nation, Nak’azdli Band, Simpcw First Nation, Sekw’el’wás First Nation, Spuzzum First Nation, Stswemecem'c Xgat'tem, T’it’q’et First Nation, T’exelceme, T’eqt’aqtn’mux First Nation, Tl’azt’en Nation, Tl’esqox First Nation, Tl’etinqox First Nation, Tsal’alh First Nation, Tsi Deldel First Nation, Xaxli’p First Nation, Xat’sull First Nation, Xeni Gwet’in First Nation, Xwisten First Nation, and Yunesit’in Government all reported to be affected either emotionally, physically, spiritually, or economically by this disaster (Shandro et al. 2016). The Mount Polley mine disaster had significant social

impacts, particularly on the Indigenous communities in the area. The Lhtako Dene Nation, whose territory includes the area around Quesnel Lake, was severely impacted by the disaster. Quesnel lake is a vital source of fish for the Lhtako Dene people, and the release of the tailings had a significant impact on their traditional fishing practices (Shandro et al. 2016). The disaster also had a significant impact on their cultural practices, as many of their cultural practices are centered around the natural environment. For instance, salmon fishing is an important socio-cultural activity that strengthens bonds between community members. Occuring every year, these events are critical for these communities to maintain their way of life. The salmon embody a time when the entire community can come together in the harvesting, preparing, and preserving for the future, teaching younger generations skills, process, and traditions to the next generation (Shandro et al. 2016). Elder Mike Arnouse from Adams Lake further discussed the cultural-communal importance of salmon harvesting while speaking during the Knowledge Makers workshop hosted on the unceded territory of the Tk'emlups te Secwepemc.

### **Salmon**

Polley Lake, Hazeltine Creek, and Quesnel Lake all drain into the Fraser River, an incredibly important watershed for salmon spawning. The Fraser River is one of the main entryways Pacific BC salmon use to get to their spawning grounds, including the salmon populations of Adam's River and Shuswap Lake (Cliff Arnouse 2021). The relationship between the Indigenous peoples located within the Fraser watershed and the salmon that spawn there cannot be understated. The cultural and traditional significance of the salmon is paramount for all First Nation communities on the Fraser who have depended on and harvested salmon in these areas since time immemorial (Mike Arnouse 2023). In a health assessment report published in 2016 that looked at the affects of the Mount Polley Mine Disaster on the aforementioned First

Nation communities, 21 reported experiencing a “decrease in individual fishing practices” (Shandro et al. 2016, 8-9). Furthermore, the disaster has had significant social impacts on local Indigenous communities, who have been disproportionately affected by the contamination of their traditional lands and waters. The Williams Lake Indian Band, which is located downstream from the Mount Polley mine, has reported a decline in fish stocks and the loss of traditional harvesting practices due to the contamination of Quesnel Lake. The disaster has also had a significant impact on the mental health of local Indigenous communities, who have experienced increased stress, anxiety, and trauma as a result of the environmental damage and loss of cultural practices (Shandro et al. 2016).

### **Toxic Bioavailability**

Gregory G. Pyle, Raegan D. Plomp, Lauren Zink, and Jaime L. Klemish, researchers at the University of Lethbridge, conducted tests on the contaminated areas affected by the tailings pond failure. Particularly, they were studying invertebrates like freshwater scuds, or “Hyalella”, an important food source for juvenile salmon and other fish species. They found that “Hyalella having direct access to metal-contaminated sediments showed reduced survival and growth relative to those in reference or control treatments” and that “These results suggest that metals from the fine sediments associated with the Mount Polley mine disaster are bioavailable and potentially toxic to epibenthic invertebrates, even several years after the initial breach” (Pyle et al. 2022, 70380). Bioavailability speaks to the process by which harmful toxins, in this case sediments containing chemicals and heavy metals from the mine tailings, can enter the food chain of an ecosystem. When these toxins enter the food chain, they can go through a process called bioaccumulation, wherein a predator eats multiple prey items containing small amounts of toxins, which then accumulate to a larger, combined amount within the predator. This process

can repeat multiple times within an ecosystem until it reaches a tertiary predator, such as people. Since Pyle et al's findings show that these harmful toxins are bioavailable, it means they also have the potential to bioaccumulate (2022). The environmental impacts of the Mount Polley mine disaster are significant and are expected to be long-lasting. The release of millions of cubic meters of mine waste and tailings into nearby waterways caused the water to turn cloudy and brown, and the sediment settled at the bottom of the lake. The toxic chemicals in the mine waste pose a threat to aquatic life and other wildlife that depend on the lake's ecosystem. The release of the tailings also affects the water quality of the Fraser River, which is a vital source of drinking water and irrigation for the region. The disaster has also had significant impacts on the forests in the area. The forest ecosystem in the area has also been affected, as the toxic chemicals in the tailings have seeped into the soil, affecting the growth of plants and other vegetation. In a Human Health Risk Assessment created by Golder Associates Ltd and written by Trish Miller, Reidar Zapf-Gilje, Victoria Hart, and Christina Quinn on behalf of Imperial Metals, it was found that the groundwater underneath Hazeltine creek contained "iron, manganese, arsenic, molybdenum, and sulfate" at levels in excess of those deemed safe for human consumption (Miller et al 2017, 4). Furthermore, while this report assures the following food subsistence sources are low risk for adverse health effects, it does claim to find elevated levels of aluminum, copper, and vanadium in "berries, [traditional] plants, deer meat, deer liver, moose meat, moose liver, grouse, fish, and cattle" within this area, as well as in surface water (Miller et al 2017, 4). These factors contribute to hesitation and unease among Indigenous communities in their collection and harvesting of the subsistence foods, and traditional medicines that these communities rely on.

## **Legislation**

Since the Mount Polley Mine Disaster, the BC Government has introduced new regulations and legislature to amend the Mines Act. However, “While the government now requires independent expert panels to advise owners (and regulators) on whether tailings storage facilities at new mines are ‘designed, constructed and operated appropriately, safely and effectively,’ this advice is non-binding. The company is under no legal obligation to act on it” (Pollon 2017, para. 20). While the BC Government did announce that they were going to fine Imperial Metals, the company that owns Mount Polley mine, no such fines have been issued, in fact, Mount Polley Mine has been allowed to continue operations by the BC Government less than a year after the spill (Pollon 2017). The Canadian government and mining industry were criticized for their response to the Mount Polley mine disaster. Many argued that the government and industry failed to take adequate steps to prevent the disaster and mitigate its impacts. The government was also criticized for its slow response to the disaster and for its lack of transparency in its communications with the public. In response to the disaster, the government of British Columbia implemented several measures to prevent future disasters. These included changes to regulations governing the mining industry, increased monitoring of tailings dams, and improved water management practices. The government also established an independent panel to review the disaster and make recommendations for improvements (Pollon 2017). Mount Polley Mine produced a Human Health Risk Assessment Report, performed by Golder Associates Ltd, which sets out a plan for remediation efforts as well as evaluations of the affected areas for toxicity and harm to life (Miller et al 2027). Because of the significant impacts of the Mount Polley mine disaster, the BC government has been criticized for its response and handling of the situation. For instance, Mining Watch Canada has accused the government of failing to hold

Imperial Metals accountable for the disaster and failing to adequately regulate the mining industry. And, in November 2022, Mining Watch Canada brought criminal charges against the BC government for its role in the Mount Polley mine disaster, alleging that the government failed to enforce regulations and protect the environment (Lavoie 2016).

### **Negligence**

In a section of Hart's publication, *Negligence, Mens Rea, and Criminal Responsibility*, he focuses primarily on what negligence is, and provides a multitude of definitions for negligence in its varying forms. Specifically, the definition by which I will be referencing is what he says is "a failure to take reasonable precautions against harm, unaccompanied either by intention to do harm or an appreciation of the risk of harm" (Hart 1968, p. 137). If the governmental agencies which oversaw this industry had done their due diligence and fulfilled their fiduciary duty to the public and environment (public interest), then one could easily speculate that the events of Mount Polley Mine Disaster would have never transpired. A fiduciary duty is a legal or ethical relationship of trust, often meaning that one party ought to act with the beneficence of another party in mind. If the laws already in place were sufficient, then the disaster never would have occurred. For instance, an independent group who has the legal power to implement checks and balances on the autonomy of the business and corporations within the mining industry, but separate from it, could, through regular screenings, provide mandatory recommendations to changes in mining infrastructure and practice on a case by case basis. Furthermore, additional involvement with local Indigenous peoples, such as those who could be affected by a disaster, perhaps such as the Mount Polley Mine tailings breach, wherein meaningful input by these groups may alter or negate the autonomy of these businesses and corporations could also prove an effective measure to prevent similar disasters from occurring.

A promise made by the BC Government was that BC taxpayers would not be contributing to the clean-up cost of the tailings breach. However, even though Mount Polley has paid \$12 million in restitutions, “One economist has estimated that British Columbians are on the hook for a \$40 million clean-up bill for the Mount Polley disaster” (Pollon 2019, para. 7). The BC Government also gave themselves a deadline to fine Imperial Metals under the Mines Act as well as the Environmental Management Act, both of which are provincial statutes. However, they’ve issued no fines and the time limit to do so has already passed, and in 2019, the window to issue fines under the federal Fisheries Act also passed with no government action (Meissner 2019). Furthermore, in an official statement in the *Biennial Report on Contaminated Sites*, which details over 80 mining sites the Crown is responsible for, it is stated that “the Province has recognized \$508 million in liabilities related to contaminated sites” (Forests 2016, para. 2). Five years after the disaster, the cleanup and remediation of the Mount Polley mine site are still ongoing, and taxpayers are still on the hook for the cost of the cleanup (Lavoie 2019). A report by The Narwhal in November 2022 found that taxpayers have already paid over \$40 million for the cleanup, and that the final cost could be much higher. The report also found that the recommendations of the expert panel that was appointed to investigate the disaster have not been fully implemented, and that they are not legally bound to follow these recommendations (Pollon 2017). The fear in providing more strict regulations to enforce accountability on mining companies is that it may discourage investment into the province and the resource development industry. However, this is exactly what must be done. Mining corporations ought to be held accountable, and not only to the extent of remediative efforts when something does go wrong, but also in the sense that they ought to be held accountable in putting every effort into preventing events such as these. The government of BC must introduce stronger repercussions when mining



corporations fail to meet industry standards as set out in legislation, which ought to include provisions for land restoration and remediation once a mine closes.

### **Indigenous Rights**

As was decided in *R v. Sparrow*, “The words ‘recognition and affirmation’... incorporate the government's responsibility to act in a fiduciary capacity with respect to aboriginal peoples and so import some restraint on the exercise of sovereign power” (*R. v. Sparrow* 1990, para 7). The court further quoted Section 35 of the Constitution Act, 1982, wherein the following is provided: “The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed” (*R. v. Sparrow* 1990, para. 21). What this means is that there has to be reasonable grounds for the government to impose restrictions on Aboriginal Rights. In a First Nations Health Authority Report researching the social impacts of the dam breach on local Indigenous communities, they state that “the dam breach has resulted in changes to First Nation fishing practices, which has resulted in shifts in diet composition, physical activity, and cultural practices” (Shandro et al. 2016, 50). Bev Sellars, chair of the First Nations Women Advocating for Responsible Mining and a councilor of the Xat’sull First Nation in Williams Lake said “The disaster that was the Mount Polley tailings pond collapse is not over for those of us who live and depend on the lands and waters and particularly on the salmon that have always sustained us” (Lavoie 2016, 28). The continuing effects of the disaster are impacting Indigenous people’s ability to practice their rights through cultural and traditional means of subsistence and commercial fishing. Deficiencies in the BC Mines Act have allowed for the unreasonable infringement of Indigenous rights.

In conclusion, the Mount Polley mine disaster was a catastrophic event that had significant environmental, social, and economic impacts on the local communities and the

surrounding ecosystems. The disaster highlighted the risks and consequences of large-scale mining operations and the importance of adequate regulation and oversight. It also underscored the need for greater accountability and responsibility on the part of mining companies and governments. While cleanup and remediation efforts are ongoing, the long-term impacts of the disaster are still uncertain, and there is a need for continued monitoring and assessment of the situation.

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