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GOING UPSTREAM

The impact of industrial mining in Canada and by Canadian mining companies abroad on the human rights to safe drinking water and sanitation



Brief prepared for the country visit of the UN Special Rapporteur on
the human rights to safe drinking water and sanitation,
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[MiningWatch Canada](#) works in solidarity with Indigenous peoples, non-Indigenous communities, and workers who are dealing with environmental and human rights impacts of potential or actual industrial mining operations across Canada, and by Canadian companies operating internationally. Since 1999, we have provided technical expertise and advocacy support to hundreds of communities across the globe as they assert their rights to safe drinking water and sanitation in the face of imminent and past harm by industrial mining.

Our experience, over more than 20 years, is that every community facing industrial mining will, at some point, experience some or all the impacts summarized below. In this brief, we follow with some more detailed examples¹ to shed light on the human and environmental cost of these impacts, and we provide important recommendations for action to better protect the human rights to safe drinking water and sanitation – recommendations we urge the Special Rapporteur to take into consideration when he visits Canada.

1 Unless otherwise indicated, all mining companies cited in this brief are headquartered in Canada.

Direct impacts of industrial mining on drinking water and sanitation

Canada is a mining country – headquarters to [nearly half](#) of the world’s publicly traded mining companies and home to tens of thousands of mine sites currently under exploration, exploitation, or abandoned.² Industrial mining is an inherently destructive process causing significant hydrological changes, which often **contaminate existing water supplies**. Mining is also very water intensive, causing **depletion of surface and groundwater**, which can disrupt access and reduce the water available to sustain local communities, ecosystems, and regional biodiversity.³

Contamination of surface and ground water from toxic spills, mine waste (tailings and waste rock), and effluent occurs during and following mining operations (eg. Barrick’s [Veladero mine](#) in Argentina, Pan American Silver’s [Quiruvilca mine](#) in Peru, and Teck Resources’ coal mines in the [Elk Valley](#) of British Columbia). Spills include the **partial or total collapse of tailings dams**, sending toxic sludge laden with heavy metals into local rivers and watersheds (eg. Imperial Metals’ [Mount Polley mine](#) in British Columbia). At some sites, waste rock and tailings are deliberately dumped into river systems (eg. Barrick Gold’s [Porgera Joint Venture mine](#) in Papua New Guinea) or lakes (see below). **Acid rock drainage and metal leaching** is another common mechanism of contamination (eg. the [Tulsequah Chief mine](#) in British Columbia and several of [Goldcorp’s operations](#) in the Americas). Mine sites and wastes frequently require long term monitoring and water treatment, for decades or even in perpetuity.

Health impacts result from exposure to contaminated water for drinking and sanitation (eg. Goldcorp’s [Marlin mine](#) in Guatemala). Insufficient and reliable access to bottled water following significant spills is common (eg. Barrick Gold’s [Pueblo Viejo mine](#) in the Dominican Republic and its [Veladero mine](#) in Argentina, and Equinox Gold’s [Aurizona mine](#) in Brazil), forcing downstream communities to use contaminated water to bathe, cook, and clean. Additional health impacts also arise from eating poisoned fish and other contaminated food sources following toxic spills.

Reduced water supply results from mining activities that divert or remove water, affecting surface and groundwater flows. In addition to dewatering mine workings below the water table, the water-intensive nature of mining operations that use millions of litres of water per day can put significant stress on water availability for consumption and irrigation (eg. OceanaGold’s [Didipio mine](#) in the Philippines and Dundee Precious Metals’ proposed [Loma Larga](#) project in Ecuador).

Broader impacts

While mining operations can directly infringe on the human rights to safe drinking water and sanitation, the larger political framework that supports and protects Canadian mining companies can also put key water sources at risk.

2 Canada has more than 10,000 orphaned and abandoned mines, many of which pose a threat to ground and surface water. An indication of the lack of care Canada has for this issue is that 20 years after an attempt was made to create an inventory of all the country’s orphaned and abandoned mines, this inventory remains incomplete. No national program exists to ensure protection of ground and surface water from these sites.

3 For more details on these and other impacts of mining on water, see pages 14-20 of “Impacts des projets miniers sur l’eau: Guide de vulgarisation technique et législatif en vue de soutenir l’action citoyenne” [[online](#)].

Global Energy Transition – The [Canadian mining industry](#) and the Canadian government⁴ are increasingly using the global renewable energy transition as justification to advance mining in sensitive ecosystems. A proposed regional hub for lithium extraction in Quebec would affect the eskers – geological formations that help provide some of the purest sources of drinking water in the world (Australia’s Sayona Mining and its [North American Lithium mine and Authier Lithium project](#)). There are also proposals to expand mining development into the world’s second-largest peatland complex in the “[Ring of Fire](#)” in the Hudson Bay Lowlands in Ontario, Canada (Australia’s [Wyloo Metals](#)). These ecosystems play vital roles in the water recharge cycle, helping provide clean water for areas far beyond the immediate project area.

International arbitration – Several Canadian companies are threatening or actively pursuing international arbitration (ISDS) against governments for denying exploitation licences or otherwise restrict mining activities, who do so most often in order to protect water sources (eg. [Eco Oro](#) and [Aris Gold](#) in Colombia).⁵

Lack of recourse in Canada – Several UN bodies⁶ have repeatedly called on Canada to address widespread allegations of human rights abuse and environmental harm caused by Canadian mining operations abroad. Despite extensive documentation of such harms,⁷ however, successive governments have failed to adopt meaningful legislation to hold these companies to account. Non-judicial mechanisms such as Canada’s National Contact Point for the OECD Guidelines have [failed to address](#) the problem, while the new Canadian Ombudsperson for Responsible Enterprise [lacks the necessary independence and investigatory powers](#) to be effective. Within Canada, minimal fines are often imposed on companies for significant and repeated environmental violations (eg. Imperial Metals at [Mount Polley](#)),⁸ and the federal government has been generally unwilling to prosecute under the *Fisheries Act*. This has allowed, and even encouraged, companies to create a mess and then leave the responsible governments (federal/provincial/territorial) – and Canadians – on the hook for clean up.

4 Canada recently adopted a [Federal Critical Minerals Strategy](#) in an effort to advance mining for minerals it deems “critical” for the energy transition such as lithium, nickel, cobalt, graphite, and zinc, among others; other provinces, such as [Ontario](#), [Quebec](#), and [Saskatchewan](#) have already adopted similar policies, and other jurisdictions like British Columbia have expressed intention to advance its own strategy.

5 See the 2019 report, “Extraction Casino: Mining Companies Gambling with Latin American Lives and Sovereignty through Supranational Arbitration” [\[online\]](#); and the 2023 report from the International Mission to Colombia #StopISDS, calling for a people’s review of investment treaties which allow transnational companies to sue the State of Colombia in supranational tribunals [\[online\]](#).

6 See for example p. 9-10 of the 2023 brief prepared by MiningWatch Canada for the House of Commons’ Standing Committee on International Trade (CIIT) on human rights and environmental abuses by Canadian mining companies operating overseas [\[online\]](#); and a list of UN commentary calling on Canada to facilitate access to remedy [\[online\]](#).

7 Visit the MiningWatch Canada website for extensive documentation [\[online\]](#); additional examples are found in the 2023 MiningWatch brief, “Canada’s Mining Dominance and Failure to Protect Environmental and Human Rights Abroad” [\[online\]](#).

8 See more examples in the report, “Dirty Dozen 2023: BC’s Top Polluting and Risky Mines” [\[online\]](#).

CASE EXAMPLES

National - Harm caused by transnational and Canadian mining companies operating in Canada

Dumping of mine waste into lakes

Operation | QUEBEC IRON ORE has been given authorization by the provincial government to dump tailings and waste rock from its **Bloom Lake mine** in Fermont, **QUEBEC** directly in nearby lakes, which will destroy eight lakes and contaminate local river systems. This goes against the recommendation of the independent *Bureau d'audiences publiques sur l'environnement* and a provincial requirement to develop alternative waste storage plans that would not destroy the lakes. Storing mine tailings and waste rock in lakes is a persistent environmental issue across Canada; the federal government has already sacrificed 72 bodies of water including lakes to create Tailings Impoundment Areas.⁹ The Bloom Lake project is now awaiting federal approval, and the [Minister of Environment and Climate Change](#) has been urged to require the company to develop an alternative plan to save the lakes.

Permit to pollute beyond legally accepted standards

Operation | Swiss-based **GLENCORE** operates the **Horne smelter** in Rouyn Noranda, **QUEBEC** which routinely overexposes the local population to arsenic, cadmium, lead, nickel and dozens of other heavy metals, increasing risks of cancers and pulmonary diseases. The Quebec government has permitted Glencore to release arsenic into the environment and ultimately into the water supply at [20 times the provincial standard](#).

The biggest environmental disaster in Canadian history

Operation | IMPERIAL METALS' Mount Polley Mine in **BRITISH COLUMBIA**, was the site of a 2014 tailings dam collapse that poured some 25 million cubic metres of water and tailings effluent directly into Polley and Quesnel Lakes. Hundreds of tonnes of arsenic and lead, as well as other heavy metals including copper and nickel, were released in the largest environmental disaster in Canadian history. The spill cost several First Nations [access to sacred land](#) and traditional food and medicine, and disrupted fishing practices. Imperial Metals was not charged for any legal violations, and in fact has been granted another [licence to dump effluent](#) directly into Quesnel Lake – a major salmon spawning and rearing area of the Fraser River system.

Abandoned mine threatens transboundary watersheds

Abandoned | The Tulsequah Chief Mine has been leaching contaminants into the salmon-bearing Taku River in **BRITISH COLUMBIA** since the 1950s, when it was closed and abandoned by Cominco (now Teck Resources). The B.C. government initiated a cleanup process in 2019, but the Taku River Tlingit First Nation whose territory it is in, as well as downstream Alaska Indigenous and conservation groups and fishers, are calling for [faster action and meaningful involvement](#) in the cleanup process.

⁹ *Metal and Diamond Mining Effluent Regulations*, SOR/2002-222, schedule 2 [[online](#)].

Mining exploration in areas facing legacies of water contamination

Exploration | The Asubpeeschoseewagong Anishinabek (Grassy Narrows First Nation) in ONTARIO, is suffering from decades of mercury poisoning from pulp and paper operations and years living under boil water advisories, compounded by the impacts of industrial logging and hydroelectric dams. Now, gold exploration further threatens water quality, livelihoods, and Indigenous sovereignty. Mining claims on Asubpeeschoseewagong Anishinabek territory have exploded in spite of a [2018 Land Declaration](#) banning all industrial activities, including mining, without explicit consent. The Nation is currently suing the Province for having granted eight exploration permits to three companies in violation of the Land Declaration and their inherent sovereignty rights.

International - Harm caused by Canadian mining companies operating globally

Toxic spills and water contamination

Operation | At BARRICK GOLD's Veladero Mine in ARGENTINA, the company has been accused of at least five toxic spills and operating in violation of Argentina's *Glaciers Law*, which prohibits mining in glacial and periglacial areas. In 2022, the UN Special Rapporteur on Toxics and Human Rights expressed [significant concern](#) about repeated spills that have contaminated the watershed hundreds of kilometres downstream with cyanide and mercury.

At Barrick's **Porgera Joint Venture mine**¹⁰ in the mountainous highlands of **PAPUA NEW GUINEA**, tailings are ejected directly into the headwaters of the 800-kilometre-long Strickland River system.¹¹ Additionally, the mine's massive waste rock dumps were designed to move like glaciers and continuously empty themselves into the valleys around the mine, contaminating nearby waterways. Due to the massive contamination of surface water around and downstream of the mine with heavy metals, the local Ipili people struggle to find clean drinking water.¹² After 30 years, the mine has just received a permit for another 20 years of operations and will continue to use the local river system as its waste dump.

Barrick's **North Mara gold mine** in **TANZANIA** has long been [accused of unauthorized releases](#) of mine waste into the North Mara River with devastating impacts on livestock and local Kuria communities. These reports have made [regular headlines](#) starting as early as 2009.¹³ As recently as 2022, Barrick [acknowledged](#) another spill into the river.

10 See more in the detailed case study produced by MiningWatch Canada, "Barrick Gold Corp's Porgera Joint Venture Mine: A legacy of Ignoring Human and environmental rights abuses" [\[online\]](#).

11 CSIRO Australia. 1996. Review of Riverine Impacts, Porgera Joint Venture. December [\[online\]](#); CSIRO Australia. 2001 (S.C. Apte). Tracing Mine-Derived Sediments and Assessing Their Impact Downstream of the Porgera Gold Mine.

12 See more in the 2019 report produced by Columbia Law School's Human Rights Clinic and Columbia University's Earth Institute, "Red Water: Mining and the Right to Water in Porgera" [\[online\]](#).

13 See more and in the 2009 report by the Norwegian University of Life Sciences, "Investigation of trace metal concentrations in soil, sediments and waters in the vicinity of 'Geita Gold Mine' and 'North Mara Gold Mine' in North West Tanzania" [\[online\]](#) and a joint press release from the Tanzania Episcopal Conference (TEC), Muslim Council of Tanzania (BAKWATA) and the Christian Council of Tanzania (CCT) [\[online\]](#).

Exploration in water recharge areas and biodiversity hotspots

Exploration | DUNDEE PRECIOUS METALS is pressing to develop the **Loma Larga** gold-copper mine in the páramo de Kimsakocha in **ECUADOR** despite an [expert review](#) calling the project a “ticking time bomb” for arsenic contamination. The review found that in its environmental impact assessment, the company had artificially separated the páramo (high-altitude wetland key to storing and recharging the region’s water cycle) and the groundwater, thereby ignoring key risks that contamination from mining could threaten the drinking water for tens of thousands of people in local communities and the nearby city of Cuenca.

Industrial gold projects on small islands

Construction | BARU GOLD is currently building the **Sangihe Gold Project** on the small 736-square-kilometre Island of Sangihe in **INDONESIA**, despite strong opposition and [multiple court rulings](#) overturning the company’s environmental permit, which was granted in violation of Indonesia’s own laws prohibiting mining on small islands. Communities fear that mining operations will have an irreversible impact on the island’s fresh water supply.

Growing movements to protect water in the face of mining

While industrial mining practices continue to put access to safe drinking water and sanitation for many communities across Canada and globally at risk, powerful community organizing to protect life continues. Indigenous communities are exerting their rights to free, prior, and informed consent when it comes to any and all mining activities on their lands (eg. [Treaty 9](#) Chiefs in Northern Ontario against Ring of Fire development, [Gitxaala Nation’s](#) challenge of the B.C. *Mineral Tenure Act* as a violation of their Indigenous governance, and many others). In northern Quebec, more than a [dozen municipalities](#) have called on the provincial government to withdraw all mining claims from the eskers to protect water. In southern Quebec, the [Coalition québécoise des lacs incompatibles à l’activité minière](#) unites more than 125 lake associations in calling for the protection of lakes from mining development. Quebec civil society is calling for [comprehensive reforms](#) to strengthen the province’s mining laws, notably regarding impacts on water, and to grant communities the ability to designate “Territories Incompatible with Mining.” Globally, movements are growing to further protect and identify “no go” zones such as the [deep seabed](#), the [Amazon](#), the [páramos](#), and other areas critical for regulating our global climate. These movements play a central role in upholding the human rights to safe drinking water and sanitation, and we look to them for direction.

SPECIFIC RECOMMENDATIONS:

- The federal, provincial, and territorial governments must make all mining policies consistent with the UN Declaration on the Rights of Indigenous Peoples, recognizing especially that the existing 'Free Entry' system for mining is a violation of Indigenous self-determination and actively puts at risk the human rights to safe drinking water and sanitation.
- Governments must ensure that mining companies plan sufficiently for the long-term treatment of water affected by mining activities. Adequate bonds must be in place prior to the start of mining activities to better ensure there are sufficient funds should the company walk away from the project.
- All jurisdictions in Canada must require more rigorous environmental impact assessments on all projects, ensuring that assessment processes are co-designed and co-implemented with Indigenous governments as appropriate, and ensuring that there is adequate time and financial support allocated, from the earliest stages, to allow meaningful public participation.
- Mining laws must be reformed to allow for the creation of Territories Incompatible with Mining or "no-go zones" based on Indigenous and community land-use priorities and processes.
- Canada must pass comprehensive mandatory human rights and environmental due diligence legislation, which would require Canadian companies operating abroad to take action to prevent human rights abuses and environmental harm and, if they fail, would create access to Canadian courts for global victims to seek justice and remedy.
- Strengthen the Canadian Ombudsperson for Responsible Enterprise (CORE) by increasing its independence and providing it with the necessary investigatory powers to compel witness testimony and documents, as originally committed to by the Government of Canada.

CONTACT INFORMATION

For additional information on regional-specific issues, please consult with the following MiningWatch Canada staff:

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