



**Not Yet a World Leader:  
Environmental Reviews of Metal Mines in  
British Columbia**

**May 3, 2022**

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## Executive Summary

British Columbia is not yet a “world leader” in its environmental reviews of proposed metal mines despite the province’s claims to the contrary.

B.C.’s mining economy is important and poised for expansion, but many operating mines currently discharge selenium and other pollutants into rivers such as the Similkameen, Stikine and Taku that flow into the United States.

Environmental reviews, also known as environmental or impact assessments, are an essential tool to determine the environmental, economic, social, cultural and health effects of natural resource projects such as metal mines and to mitigate adverse impacts such as water pollution. In British Columbia, environmental assessments are managed by the Environmental Assessment Office pursuant to the 2019 *Environmental Assessment Act* (BCEAA). Assessment reports inform provincial decisions to approve (or not) projects subject to the BCEAA.

The Reviewable Projects Regulation is the primary instrument for determining whether a proposed mine is assessed under the BCEAA. This report concludes that loopholes in the Regulation allow mining companies to avoid assessments and proceed with new or expanded mines that are likely to have significant adverse impacts. One loophole in the Regulation allows a proposed mine with less than 75,000 tonnes of annual ore production to avoid assessment; the comparable threshold prior to 2019 was 25,000 tonnes. Another loophole requires an assessment only for a proposed mine that would clear more than 600 hectares of land.

These loopholes have meant that least five mines likely to have significant environmental impacts avoided assessment or would have avoided assessment – Elk Gold, Premier Gold, Copper Mountain Expansion, Yellow Giant and Bonanza Ledge. The report analyzes the environmental review laws of Washington State, Alaska, Northwest Territories and northern Quebec, and concludes that assessments would have been required for each of these five mines if the laws of those jurisdictions applied.

The loopholes in the Regulation create opportunities for “mining-by-installment” strategies that allow large mines having significant adverse effects to be developed sequentially without assessment so long as the initial mine and each subsequent expansion fits within these loopholes.

This means even more new mines and mine expansions may be developed in British Columbia without environmental review under the BCEAA, potentially polluting rivers that flow into the United States and adding to existing cross-border political tensions arising from current pollution from B.C. mine discharges.

The report recommends that the BCEAA Regulation be amended to require review of any new metal mine, any expansion of an existing mine that has not been previously assessed, and any

expansion of a previously assessed mine that disturbs more than an additional 50 percent of the land disturbed by that mine.

Environmental reviews of proposed B.C. metal mines could be transformed by the 2019 *Declaration of the Rights of Indigenous Peoples Act* and action plan. In consultation and collaboration with Indigenous peoples, B.C. must align all provincial laws with the UN Declaration on the Rights of Indigenous Peoples, which includes the right of Free, Prior and Informed Consent for activity on lands of Indigenous Peoples.

B.C. First Nations may move ahead with development and implementation of their own mining regimes including Indigenous-led impact assessments, or develop collaboration agreements for sharing decision-making on natural resource development such as the B.C. – Lake Babine First Nation agreement. The report recommends that B.C. and Canada provide funding to First Nations to provide for Indigenous-led environmental reviews of projects, especially those not subject to federal or provincial assessment.

International laws and standards apparently have not figured in British Columbia's decisions to assess metal mine projects sited on transboundary waterways. The *Boundary Waters Treaty* provides that waters flowing across the Canada – U.S. boundary shall not be polluted on either side to the injury of health or property on the other. B.C. has the most serious responsibilities to comply with the treaty given that the province is almost entirely upstream of states.

The Espoo Convention creates an international standard providing for participation of affected citizens of a neighbouring country in an assessment by a host country of a project such as a metal mine likely to have significant adverse transboundary impacts. The report recommends that Americans affected by a proposed B.C. mine likely to have adverse transboundary environmental effects be accorded the same rights to participate in environmental reviews as citizens of other countries (such as Greenland) enjoy with respect to proposed mines in other parts of Canada.

## **1. Introduction**

*All mining projects, including those near British Columbia's transboundary rivers, are subject to world-leading regulation and oversight.*

*- B.C. Premier John Horgan, July 19, 2019<sup>1</sup>*

Does British Columbia lead the world in its environmental reviews of proposed new metal mines and mine expansions?

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<sup>1</sup> Letter to U.S Senators Murkowski, Sullivan, Crapo, Risch, Tester, Daines, Murray and Cantwell, from British Columbia Premier John Horgan, July 19, 2019 at 1.

This memorandum<sup>2</sup> assesses Premier John Horgan's claim by first questioning whether British Columbia refrains from requiring environmental reviews of some proposed new metal mines or mine expansions likely to cause significant adverse environmental effects. The second question is whether selected North American subnational jurisdictions (e.g., states, provinces, territories) require environmental reviews for proposed new metal mines or mine expansions that were not or would not have been reviewed in B.C. The third and final question is whether British Columbia's laws, policies and practices meet international standards with respect to environmental reviews of proposed new metal mines and mine expansions.

These questions are particularly important because B.C. is, for the most part, upstream of Alaska and Washington, as well as Alberta, Northwest Territories and Yukon. Water pollutants discharged from B.C. mines end up in transboundary rivers such as the Columbia, Similkameen, Okanogan and Skagit (Washington), the Taku, Stikine and Unuk (Alaska), the Peace (Alberta, Northwest Territories) and the Liard (Yukon, Northwest Territories).

The memorandum proceeds first by explaining what environmental reviews are and the criteria used to determine whether an environmental review process leads the world. Next B.C.'s environmental review laws and policies are summarized and examples identified of new B.C. mines and mine expansions likely to cause significant adverse environmental effects that were not reviewed. The environmental review laws and practices of Alaska, Washington, Northwest Territories and northern Quebec are then summarized and conclusions drawn as to whether they are more inclusive in their application to new mines and mine expansions than those of B.C. The focus in this analysis is on whether an environmental review has been or is being done, and not on the quality or stringency of the environmental review.

Next, the memorandum examines whether B.C.'s environmental laws and practices are consistent with international laws (e.g., *Boundary Waters Treaty of 1909*, *Convention on Environmental Assessment in a Transboundary Context*). The memorandum concludes with responses to the three posed questions and recommendations for improving BC's environmental review laws and practices. Note that this memorandum does not examine B.C.'s environmental assessment process as it applies to proposed placer mines and quarries, nor compares that process with those of leading jurisdictions such as Yukon.

## 2. Environmental Reviews

Environmental reviews (also known as environmental assessments or impact assessments)<sup>3</sup> have been important to mining governance in the United States since the 1973 *National*

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<sup>2</sup> This memorandum is one of six examining the British Columbia government's claim of world leadership in mine regulation and oversight.

<sup>3</sup> The term "environmental review" is a generic term chosen to describe the legislated processes in both the United States and Canada for the assessment of the environmental effects of proposed natural resource and industrial development projects. Under NEPA, environmental reviews encompass the environmental impact statement as well as the environmental assessment, which assesses the likely significance of environmental effects as a step prior to undertaking an environmental impact statement. In Canada, "environmental assessment" and "impact

*Environmental Policy Act* (NEPA)<sup>4</sup> and in Canada since the 1984 *Environmental Assessment and Review Process Guidelines Order*.<sup>5</sup> Environmental reviews are intended to inform decisions as to whether and under what conditions undertakings such as new mines or mine expansions are to be permitted. Environmental review statutes have since been enacted as well by states, provinces and territories across North America and by Canada to implement comprehensive claims agreements with Indigenous Nations.

Environmental reviews of proposed new mines or mine expansions are important to ensuring that adverse project effects such as water and air pollution, greenhouse gas emissions and biodiversity losses are identified and mitigated. Environmental reviews have also proven to be important in terms of understanding and addressing social, cultural and economic impacts on Indigenous and other local communities as well as identifying alternatives to proposed projects and alternative means of carrying out those projects.

Indicators of a world-class environmental review process include whether environmental reviews are:

- Required as a matter of law for all new metal mines or mine expansions likely to have significant adverse environmental effects;
- Not subject to arbitrary determinations exempting projects likely to have significant adverse effects (such as limiting environmental reviews to so-called “major” projects); and
- Consistent with international laws and standards.

### **3. British Columbia’s Environmental Review Laws and Policies**

#### **3.1 Introduction**

This section summarizes key provisions of the *Environmental Assessment Act* (BCEAA)<sup>6</sup> enacted in 2018, as well as the *Declaration of the Rights of Indigenous Peoples Act* (*Declaration Act*)<sup>7</sup> enacted in 2019. The *Declaration Act* and its implementation bear strongly on the application and conduct of environmental reviews of proposed new and expanded metal mines in British

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assessment” are terms comparable to “environmental review” in the U.S. In this memorandum, environmental review does not include environmental studies or analyses that may be carried out prior to issuance of permits under mining laws in the absence of a legal requirement to undertake a NEPA review or environmental assessment under Canadian law.

<sup>4</sup> 42 USC § 4321 et seq. (1969).

<sup>5</sup> EARP Guidelines Order in Council SOR/84-467 22 June 1984.

<sup>6</sup> *Environmental Assessment Act* SBC 2018 c 51.

<sup>7</sup> *Declaration of the Rights of Indigenous Peoples Act*.

Columbia. The February 2022 statement by the First Nations Leadership Council<sup>8</sup> is an important reflection on the interaction between these two statutes.

### **3.2 Environmental Assessment Act (BCEAA)**

The BCEAA includes important new provisions to advance engagement with Indigenous communities and public participation in the environmental assessment process. For example, an Indigenous Nation may provide notice that that Nation “intends to participate in the assessment of [a] project” “within 80 days of the first day of publication of the initial project description.”<sup>9</sup> A participating Indigenous Nation thereby is empowered to make a decision on whether it consents to that project.

As well, the BCEAA enables the Minister to enter into collaboration agreements with Indigenous Nations for environmental assessments in its territory and to vary the act to the extent necessary to accommodate agreement provisions.<sup>10</sup> The Lake Babine First Nation collaboration agreement signed with B.C. in November 2021 establishes a precedent for shared decision-making by First Nations and the province under the BCEAA.<sup>11</sup>

However, the BCEAA adopts an approach similar to B.C.’s predecessor law<sup>12</sup> and the federal *Impact Assessment Act* in requiring that only those projects designated by regulation or Ministerial order are subject to environmental review. Under the BCEAA, activities that constitute a “reviewable project” require an environmental assessment and must obtain an environmental assessment certificate before the reviewable project may be carried out or undertaken, unless an exemption order has been issued.<sup>13</sup> The Lieutenant Governor in Council “may make regulations prescribing what constitutes a reviewable project for the purposes of this Act.”<sup>14</sup>

The Reviewable Projects Regulation (the Regulation)<sup>15</sup> sets out the categories of projects that are required to be assessed. However, the Minister may exempt a project from the requirement even if the threshold has been met.<sup>16</sup> As well, the responsible Minister may

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<sup>8</sup> First Nations Leadership Council, “New Report Recommends First Nations in BC take immediate Control of Mining in their Territories”, February 1, 2022. <https://www.bcafn.ca/news/new-report-recommends-first-nations-bc-take-immediate-control-mining-their-territories>.

<sup>9</sup> *Ibid* above note 7 at s.14(1).

<sup>10</sup> *Ibid* at s.41.

<sup>11</sup> First-of-its-Kind Agreement signed between Lake Babine First Nation, B.C. <https://News.Gov.BC.CA/Releases/2021ENV0070-002242>.

<sup>12</sup> *Environmental Assessment Act* SBC 2002, c 42.

<sup>13</sup> *Ibid* above note 7 at s 6(1).

<sup>14</sup> *Ibid* at s 9(1).

<sup>15</sup> Reviewable Projects Regulation B.C. Reg. 243/2019 O.C. 607/2019.

<sup>16</sup> *Ibid* at s 17(1)(b).

designate an eligible project as a reviewable project upon application by any person, or on the Minister's own initiative.<sup>17</sup>

With regard to metal mine facilities, the Regulation prescribes 75,000 tonnes of ore production capacity per year as the threshold trigger for a reviewable project.<sup>18</sup> This is an increase over the previous threshold of 25,000 tonnes per year. The higher threshold (should it be called a bigger loophole?) appears to be arbitrary in that it is not based on any publicly shared evidence that mines with annual production less than 75,000 tonnes are unlikely to have significant adverse environmental effects.

The Regulation also requires an environmental assessment for an expansion of an existing mine that exceeds the 75,000 tonne threshold where "the modification will result in the disturbance of an area of land that was not previously permitted for disturbance and that is at least 50 percent of the area of land that was previously permitted for the disturbance at the existing project."<sup>19</sup> This threshold is problematic in referring to the area of land *previously permitted* for disturbance not the *actual* area of land disturbed.

Thus a mining company has a strong interest in proposing a permitted disturbance area large enough to accommodate future major expansions, while at the same time proposing a small initial mine with a production capacity less than 75,000 tonnes. Such a mining by installment (or project-splitting) strategy would allow such a company to avoid a BCEAA environmental review for the initial mine as well as subsequent expansions. The Regulation appears to abet such project-splitting, mining-by-installment strategies.

Further, the Regulation provides that a new mine or mine expansion is a reviewable project if it involves the clearance of 600 hectares or more of land.<sup>20</sup> Again, this threshold is not based on any publicly shared evidence that mines with an area of disturbance less than 600 hectares are unlikely to have significant adverse environmental effects.

Indeed the 600-hectare threshold appears to be so high that most new metal mines and mine expansions would not meet it (or, if they do, they would already require assessment anyway based on the tonnage threshold). For example, a survey of past and current mining projects in BC identified the disturbance area for six listed mines and found that only one (Red Chris) of the six had a disturbance area greater than 600 hectares.<sup>21</sup>

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<sup>17</sup> *Ibid* at s 11.

<sup>18</sup> *Ibid* at s 10(1)(c).

<sup>19</sup> *Ibid* at s 10(1).

<sup>20</sup> *Ibid* above note at s 4(1)(c).

<sup>21</sup> Chris Sargeant, "Table of Past and Current Mining Projects" in Gavin Smith, *When Should Projects Get an Environmental Assessment? A Backgrounder on BC's Proposed Changes to the Reviewable Projects Regulation*, West Coast Environmental Law 2019.

Taken together, the thresholds under the Regulations seem designed to ensure that some proposed metal mines or mine expansions are not subject to environmental review under the BCEAA—hardly an approach to be expected by a world leader in mine regulation and oversight.

Perhaps surprisingly, this conclusion is supported by explicit B.C. policy statements. British Columbia’s website introducing the BCEAA states that the law is intended to apply only to so-called major projects<sup>22</sup>: “The *Environmental Assessment Act* provides a mechanism for reviewing *major* projects to assess their potential impacts. British Columbia’s environmental assessment process is important to ensure that *major* projects meet the goals of environmental, economic and social sustainability”<sup>23</sup> (italics added).

The term “major project” is not used in the BCEAA or the Regulations, and neither the B.C. website nor the 2018 B.C. discussion paper that preceded enactment of the law explain what is meant by the term.<sup>24</sup>

The British Columbia government’s policy of applying the BCEAA only to major projects is similar to that of the federal government with respect to the *Impact Assessment Act* (IAA).<sup>25</sup> A 2019 federal *Discussion Paper on the Proposed Project List*<sup>26</sup> states that only “*major* projects with *the greatest potential for adverse effects* in areas of federal jurisdiction related to the environment . . .” (italics added)<sup>27</sup> would be included on the IAA’s Project List Regulations.

This statement indicates that even projects with the potential for serious adverse effects that require federal decisions are not to be included on the Project List if there are other similar projects with even more serious adverse effects. Such an approach only makes sense if a key objective in structuring the Project List is to limit the number of impact assessments carried out so that only the worst projects are reviewed, rather than ensure that federal decisions achieve sustainability in projects likely to have significant adverse effects.

Given the thresholds set out in the Regulation, it appears that BC has taken a similar approach by focusing on a handful of the largest, most environmentally risky projects. Avoiding environmental reviews of less-than-major projects, including new mines and mine expansions in B.C., is not an approach a world leader in environmental reviews would take, given that less-than-major projects will often have significant adverse effects that may be cumulative with other projects as well.

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<sup>22</sup> [www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/environmental-assessments](http://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/environmental-assessments).

<sup>23</sup> *Ibid.*

<sup>24</sup> Government of British Columbia, *Environmental Assessment Revitalization Discussion Paper*, 2018. [www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/environmental-assessment-revitalization/documents/ea\\_revitalization\\_discussion\\_paper\\_final.pdf](http://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/environmental-assessments/environmental-assessment-revitalization/documents/ea_revitalization_discussion_paper_final.pdf).

<sup>25</sup> Government of Canada, *Discussion Paper on the Proposed Project List; A Proposed Impact Assessment System* (Ottawa: May 2019) at 24.

<sup>26</sup> Government of Canada, *Discussion Paper*, above note 23.

<sup>27</sup> Government of Canada, *Discussion Paper*, above note 23 at 3.



The *Yahey v. British Columbia* (Blueberry) decision of the British Columbia Supreme Court<sup>28</sup> casts further doubt on the wisdom—and perhaps the legality—of B.C.’s policy as codified in the *Reviewable Projects Regulation* that applies the BCEAA only to major projects. This decision is important because the Court held that the cumulative effects of development within the Blueberry First Nation’s territory was an infringement of the Treaty 8 rights of First Nation members. The Court found that the Province had taken up so much land in the First Nation’s traditional territory that the exercise of their treaty rights was no longer meaningful. Further, the Court found that the existing regulatory processes for authorizing industrial development do not adequately account for cumulative effects or ensure that Treaty rights are protected. The Court issued a declaration prohibiting the Province from authorizing further activities that infringe the rights of the First Nation.

The decision (which was not appealed) likely applies to other Treaty 8 B.C. First Nations and has implications for other First Nations as the Province responds to the Court’s order that the regulatory regime be reviewed and changed to account for the cumulative effects of development on the exercise of Aboriginal and treaty rights.

### **3.3 Declaration of the Rights of Indigenous Peoples Act**

The *Declaration of the Rights of Indigenous Peoples Act* (*Declaration Act*) requires British Columbia, in consultation and collaboration with Indigenous peoples, to align all provincial laws with the United Nations Declaration on the Rights of Indigenous Peoples (“UN Declaration”). Indigenous peoples’ rights as decision-making authorities on their lands include Free, Prior and Informed Consent for activity on their lands.

However, the First Nations Leadership Council issued a news release in February 2022 recommending that B.C. First Nations move ahead with the development and implementation of their own mining regimes and exercise their right of consent for all existing and future mining operations.<sup>29</sup> The Council cited the lack of progress by British Columbia in implementing the *Declaration Act* over the past two years. The news release cited a new report prepared by the B.C. First Nations Energy and Mining Council (FNEMC).<sup>30</sup> The report sets out 25 recommendations which, if implemented, would compel mining companies and prospectors to secure the approval of First Nation governments in order to obtain consent-based access to First Nations’ lands.

### **3.4 Conclusions**

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<sup>28</sup> *Yahey v. British Columbia*, 2021 BCSC 1287 (CanLII). <https://canlii.ca/t/jgpbr>.

<sup>29</sup> *Ibid* above note 8.

<sup>30</sup> First Nations Energy and Mining Council, *Indigenous Sovereignty: Implementing Consent for Mining on Indigenous Lands*, January 2022. [http://fnemc.ca/wp-content/uploads/2022/01/FNEMC\\_mining\\_consent\\_FinalReport.pdf](http://fnemc.ca/wp-content/uploads/2022/01/FNEMC_mining_consent_FinalReport.pdf).

British Columbia’s policy decision to apply the BCEAA only to major projects combined with the delays in implementing the *Declaration Act* with respect to mining laws<sup>31</sup> indicates an emerging gap in the assessment of metal mining projects that may have significant adverse environmental effects yet are not deemed to be sufficiently “major” to trigger a provincial (or federal) environmental review. Indigenous-led environmental reviews could fill this gap. The size of this gap in terms of unassessed B.C. mine projects is addressed in the next section.

## **4. Examples of Metal Mines Not Reviewed Under the B.C. *Environmental Assessment Act***

### **4.1 Introduction**

This section reviews five examples of new mines or mine expansions likely to have significant adverse environmental effects that were not subject to environmental reviews under B.C.’s *Environmental Assessment Act* or would not have been subject to environmental reviews had those mines been proposed under this statute. These projects were not assessed primarily because the regulatory thresholds relating to annual ore production or disturbance area were not exceeded; thus these projects were not considered to be reviewable projects under BCEAA.

### **4.2 Elk Gold**

Elk Gold is a past-producing gold mine located in the Tulameen/Similkameen watershed southeast of Merritt B.C. and 60 km north of the Washington border. Gold Mountain Mining received a mine permit for the Elk Gold expansion from British Columbia on October 29, 2021.<sup>32</sup> At time of writing, Elk Gold is not identified in the Major Mines Registry of the Ministry of Energy, Mines and Low Carbon innovation nor is the mine permit included in the Registry.<sup>33</sup>

On its web site, Gold Mountain Mining states that the Elk Gold property is 21,187 hectares and that commercial production would begin in November 2021 with gold production estimated to be 65,000 oz annually by Year 4. Gold Mountain Mining further states that the total measured and indicated mineral resources for the Elk Gold North Siwash deposit are 3,344,000 tonnes.<sup>34</sup> The company states that memoranda of understanding (MOUs) have been signed with “three surrounding Indigenous communities”.<sup>35</sup>

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<sup>31</sup> The British Columbia government released the *Declaration on the Rights of Indigenous Peoples Action Plan 2022 – 2027* in April 2022 proposing a collaborative stewardship model of the environment, land and resources, that address cumulative effects and respects Indigenous Knowledge.  
[https://www2.gov.bc.ca/assets/gov/government/ministries-organizations/ministries/indigenous-relations-reconciliation/declaration\\_act\\_action\\_plan.pdf](https://www2.gov.bc.ca/assets/gov/government/ministries-organizations/ministries/indigenous-relations-reconciliation/declaration_act_action_plan.pdf).

<sup>32</sup> Accesswire, “Gold Mountain receives its Mining Permit from the Ministry of Mines”, Vancouver, BC, November 1, 2021.

<sup>33</sup> See the BC Major Mines Registry at [mines.nrs.gov.bc.ca](https://mines.nrs.gov.bc.ca)

<sup>34</sup> Gold Mountain Mining Inc. website [www.gold-mountain.ca](http://www.gold-mountain.ca).

<sup>35</sup> *Ibid.*

No environmental assessment was carried out under the BCEAA or impact assessment under the IAA prior to issuance of the permit. Further, no explanation is provided on the Gold Mountain Mining or B.C. government websites as to why no environmental review was carried out. For example, the questions as to whether the Elk Gold project would result in ore production exceeding the Reviewable Projects Regulation threshold of 75,000 tonnes per year or require clearance of more than 600 hectares is not addressed. Gold Mountain states that the gold is found in quartz and sulphide veins<sup>36</sup>, suggesting that acid rock drainage could result in pollution of the Tulameen and Similkameen Rivers.

#### 4.3 Premier Gold

The Premier Gold Project is a gold mine located near Stewart in northwestern B.C. several kilometres east of the border with Alaska. Ascot Resources applied for a *Mines Act* permit on February 1, 2021 and was issued the permit on December 4, 2021.<sup>37</sup>

PGP comprises a land position of 8,133 hectares with three key deposits that had historical mining activities and underground access. Combined with two smaller resource areas, the PGP total indicated resources are 4,141,000 tonnes.<sup>38</sup>

No environmental assessment was carried out under the BCEAA or impact assessment under the IAA prior to issuance of the permit. Further, no explanation is provided in the B.C.'s Major Mines Registry or on the Ascot Mining website as to why no environmental review was carried out. For example, the question as to whether the Premier Gold Project would result in ore production exceeding the Reviewable Projects Regulation threshold of 75,000 tonnes per year or require clearance of more than 600 hectares is not addressed.<sup>39</sup>

The mine permit does state that the permitted mine area is 812.2 hectares<sup>40</sup> but this does not necessarily mean that the regulatory threshold of clearance of 600 hectares has been exceeded. Further, the Premier Gold Project is proposed on a site that has already been disturbed by pits, storage areas and waste rock with an area of roughly 245 hectares.<sup>41</sup> So the clearance area of the Premier Gold Project could well be less than 600 hectares.

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<sup>36</sup> *Ibid.*

<sup>37</sup> B.C. Government News, "Premier Gold Project receives Mines Act Permit Approval", Dec. 7, 2021. [news.gov.bc.ca/releases/2021EMLI0073-00234](https://news.gov.bc.ca/releases/2021EMLI0073-00234).

<sup>38</sup> Ascot Resources website. [ascotgold.com/projects/premier-gold-project](https://ascotgold.com/projects/premier-gold-project).

<sup>39</sup> The author submitted a request by email on December 16, 2021 to the BC Environmental Assessment Office to release the determination that the Premier Gold Project and Elk Gold Expansion Projects are not reviewable projects under the Reviewable Projects Regulation, presumably because the thresholds under the Regulation had not been exceeded. No response has yet been received.

<sup>40</sup> Permit Approving Mine Plan and Reclamation Program issued to Ascot Resources Ltd. for work located at the Premier Mine, December 4, 2021. [mines.nrs.gov.bc.ca/p/5fa1e4274635c865df00d3a7/authorizations](https://mines.nrs.gov.bc.ca/p/5fa1e4274635c865df00d3a7/authorizations).

<sup>41</sup> *Ibid.*

With issuance of the *Mines Act* permit, Ascot Resources Ltd. can move forward with full-scale construction of the mine project.

The Nisga'a First Nation has expressed approval of the issuance of the *Mines Act* permit for the Premier Gold Project.<sup>42</sup>

#### 4.4 Copper Mountain Expansion

Copper Mountain mine is an active copper mine covering 6700 hectares located near the town of Princeton, B.C. roughly 35 km north of the United States/Canada border.<sup>43</sup>

The Copper Mountain mine has a long history of regulatory violations and currently discharges nearly 5.3 million litres of seepage into the Similkameen River each day at a rate of 60 litres per second.<sup>44</sup> This unauthorized seepage includes contaminants such as copper, selenium, sulphate, molybdenum, and nitrate. Copper and selenium in particular can have chronic negative effects on fish even at very low concentrations.<sup>45</sup>

A multi-phase expansion plan aims to triple annual production from 2020 levels over five years. The expansion plan includes increasing the area of the tailings pond by 70% by raising the height of the tailings dam from 192 to 255 metres.<sup>46</sup> A failure of the expansion facilities would impact the Okanagan/Columbia watershed, which provides habitat for endangered Chinook Salmon as well as Sockeye Salmon and Steelhead Trout. The Ingerbelle pit at Copper Mountain was historically mined and then reclaimed, meaning that the proposed expansion to re-mine Ingerbelle will involve significant re-disturbance of an already recovering landscape.<sup>47</sup>

No environmental review under the BCEAA was carried out for the Copper Mountain Mine expansion as production was deemed to be less than 75,000 tonnes of ore per year and the area of disturbance deemed to be less than 600 hectares. Given the Proponent's failure to address the current seepage of contaminants by December 2018 as promised, it seems likely that the proposed expansion will increase contaminant seepage in the absence of an environmental review and adoption of mitigation measures.<sup>48</sup>

#### 4.5 Yellow Giant

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<sup>42</sup> *Ibid* above note 26. "We are very pleased to see that the Mines Act Permit for the construction and operation of the Premier Gold Project has been issued," said Eva Clayton, president, Nisga'a Lisims Government. "The Nisga'a Nation has worked in extensive collaboration with Ascot throughout the permitting process, including through the Mine Review Committee process leading up to the granting of the permit."

<sup>43</sup> Copper Mountain Mining Corporation. [cumtn.com/operations/copper-mountain-mine/overview](http://cumtn.com/operations/copper-mountain-mine/overview).

<sup>44</sup> Stephanie Wood, "BC's Copper Mountain mine proposes major tailings pond, sparking cross-border concern", *The Narwhal*, April 29, 2021.

<sup>45</sup> Adrienne Berchtold, Skeena Wild, Email to Stephen Hazell, November 10, 2021.

<sup>46</sup> "Dirty Dozen 2021: B.C.'s top polluting and risky mines", *BC Mining Law Reform* at 6. [reformbcmine.ca](http://reformbcmine.ca).

<sup>47</sup> *Ibid* above note 27.

<sup>48</sup> *Ibid* above note 27.

Yellow Giant was a gold mine located on Banks Island 140 km south of Prince Rupert in northwestern British Columbia. Banks Island Gold commenced mining in 2014 and was in commercial production until 2015.<sup>49</sup> Yellow Giant was permitted to process 73,000 tonnes per year assuming maximum production, which is just under the threshold of 75,000 tonnes per year under the Regulations but well over than the previous threshold of 25,000 tonnes per year. The permit further anticipated a mining disturbance area of 12.8 hectares while a subsequent 2014 report anticipated a total disturbance area of 25 hectares, both of which are less than the regulated threshold of 600 hectares; hence no environmental review was required under the BCEAA.

Tailings releases and effluent include contaminants such as arsenic, copper, lead, zinc, aluminum, and cadmium, which are discharged directly into the marine environment. Remediation of harm to the marine ecosystem from these contaminants is difficult, which makes an environmental review that much more important before potentially permanent adverse effects are permitted. These discharges occur at an important site for food gathering (e.g., salmon, halibut, mussels, seaweed) of the Gitxaala First Nation.<sup>50</sup>

British Columbia issued a pollution abatement order in 2015 for tailings releases and effluent by Yellow Giant; the mine was shut down by provincial order shortly thereafter due to non-compliance with the B.C. *Mines Act*. The controversy ultimately led to 35 provincial and federal charges being laid.<sup>51</sup> Banks Island Gold went bankrupt in January 2016, and remediation work has not been completed.

A 2017 Preliminary Economic Assessment supported a mine restart over a 15-month mine life.<sup>52</sup> A restarted Yellow Giant would not be classified as a reviewable project under BCEAA assuming production levels and landscape disturbance similar to 2014-2015 (i.e., production less than 75,000 tonnes of ore per year and area of disturbance less than 600 hectares). Hence no environmental review of the mine would be legally required.

Note that in October 2021, the Gitxaala First Nation filed a legal challenge in the British Columbia Supreme Court against the province's "free entry" mineral claim staking regime.<sup>53</sup> The First Nation is seeking to overturn multiple mineral claims granted by the province between 2018 and 2020 on Banks Island in Gitxaala territory, without the First Nation's consent, consultation or notification. The Gitxaala's application for judicial review clearly complicates any potential restart of Yellow Giant; a court decision favourable to the First Nation could force a fundamental reform of B.C.'s mining tenure system and likely B.C.'s approach to environmental assessment of proposed mines as well.

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<sup>49</sup> Gavin Smith, "When Should Projects Get an Environmental Assessment? A Backgrounder on BC's Proposed Changes to the Reviewable Projects Regulation, West Coast Environmental Law, 2019 at 4.

<sup>50</sup> *Ibid* above note 27.

<sup>51</sup> *Ibid* above note 31 at 4.

<sup>52</sup> Vox Royalty, "Yellow Giant". [www.voxroyalty.com/royalties/development/yellow-giant](http://www.voxroyalty.com/royalties/development/yellow-giant).

<sup>53</sup> <https://www.gitxaalanation.com/single-post/gitxaala-launches-legal-challenge-to-bc-s-mineral-claim-regime>.

## 4.6 Bonanza Ledge

Bonanza Ledge underground gold mine is located 80 kilometres east of the City of Quesnel in central British Columbia and is operated by Barkerville Gold Mines (BGM). Bonanza Ledge was permitted as an open-pit operation from June 2014 to March 2015 without an environment review under the BCEAA.

The permit was subsequently amended subsequently, allowing BGM to commence underground operations at the Bonanza Ledge site in 2017.<sup>54</sup> The amended permit authorizes production of up to 150,000 tonnes per year although BGM reported in 2018 that mine production was able to achieve production of up to 2000 tonnes per day (730,000 tonnes per year). A permit for a further expansion was issued in October 2021.<sup>55</sup>

Bonanza Ledge uses a cyanide process, which has many risks and requires special management and mitigation planning.

Key environmental impacts included mine effluent discharged from the tailings storage facility, water treatment system, and a seepage collection pond into Rudy Creek and Creek 3, which empty into the Quesnel River which is habitat for Chinook, Coho, Pink, and Sockeye Salmon. Under the amended permit, up to 73 litres per second of untreated effluent is released into Lowhee Creek, in the Willow River watershed, also habitat for these salmon species.<sup>56</sup>

No environmental review was conducted of either the open-pit or underground mine under the previous B.C. *Environmental Assessment Act* and nor would one have been required if the mine had been subject to the BCEAA; however, the environmental review of the Cariboo Gold Project includes a mill to process Bonanza Ledge ore as well as some Bonanza Ledge elements.<sup>57</sup>

## 5. Environmental Review Laws and Policies of Selected Jurisdictions

### 5.1 Introduction

This section summarizes the environmental review laws and policies of selected subnational North American jurisdictions for proposed new metal mines and mine expansions as an approach to answering the question: Is B.C. a world leader in environmental reviews of mines?

The summaries address the extent to which these jurisdictions conduct environmental reviews for a broader set of new metal mines and mine expansions than British Columbia does. These selected jurisdictions include Alaska, Washington, northern Quebec, and Northwest Territories.

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<sup>54</sup> “BGM receives permit for mining on Barkerville Mountain”, April 4, 2017. [www.mining.com/web/bgm-receives-permit-for-mining-on-barkerville-mountain](http://www.mining.com/web/bgm-receives-permit-for-mining-on-barkerville-mountain).

<sup>55</sup> Government of British Columbia, “Bonanza Ledge mine expansion receives provincial permit approval”, October 2021. [news.gov.bc.ca/releases/2021EMLI0066-002042](http://news.gov.bc.ca/releases/2021EMLI0066-002042).

<sup>56</sup> *Ibid* above note 27.

<sup>57</sup> *Ibid* above note 27.

Note that this section does not summarize environmental review laws and practices of jurisdictions that apply to a narrower set of new metal mines and mine expansions than those of B.C.; the objective of this memorandum is to test B.C.'s claim of world leadership, not to establish its rank among jurisdictions that are clearly not world-leading.

## 5.2 Alaska

The *National Environmental Policy Act* (NEPA) is the primary statute governing environmental reviews of new mines and mine expansions in Alaska. NEPA's basic policy is to assure that all branches of government give proper consideration to the environment prior to undertaking any major federal action that significantly affects the human environment.<sup>58</sup>

Under NEPA, a federal action may be "categorically excluded" from a detailed environmental analysis when the federal action normally does not have a significant effect on the human environment.<sup>59</sup> If no categorical exclusion applies, the federal agency may prepare an Environmental Impact Statement (EIS) if that agency determines at the outset that the project may significantly affect the human environment. This is the case for most industrial/large-scale projects in Alaska.<sup>60</sup> Alternatively, the agency may prepare an Environmental Assessment (EA), which determines whether or not a federal action has the potential to cause significant environmental impacts. If the agency determines that the action will not have significant environmental impacts, a Finding of No Significant Impact (FONSI) is issued.<sup>61</sup> If the EA determines that the environmental impacts of a proposed major federal action will be significant, an EIS is required to be prepared.<sup>62</sup> Numerous United States courts have provided guidance on the interpretation of the term "significant" in their NEPA decisions; this guidance generally has led agencies to require that environmental impact statements be prepared for borderline projects.<sup>63</sup>

Unlike the BCEAA, NEPA does not prescribe the categories of projects that are subject to environmental review. A key determination as to whether a project such as a new mine or mine expansion is subject to environmental review under NEPA turns on whether the project requires a "major federal action."

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<sup>58</sup> *Ibid* above note 5.

<sup>59</sup> 40 CFR 1508.1(d).

<sup>60</sup> 40 CFR 1502.3.

<sup>61</sup> 40 CFR 1508.1(h).

<sup>62</sup> 40 CFR 1501.5(c)(2).

<sup>63</sup> In a leading case, *Hanley v. Kleindeinst*, the United States Court of Appeal (Second Circuit) held that an EIS should be prepared where the impacts are controversial, referring not to the amount of public opposition, but to where there is a substantial dispute as to the size, nature, or effect of the major federal action. In deciding whether a major federal action will significantly affect the environment, an agency should be required to review the proposed action in light of the extent to which the action will cause adverse environmental effects in excess of those created by existing uses in the area affected by it, and the absolute quantitative adverse environmental effects of the action itself, including the cumulative harm that results. In doubtful cases, agencies will prepare EISs rather than risk the delay and expense of protracted litigation on what is "significant."

The U.S. *Clean Water Act*<sup>64</sup> (CWA) includes two regulatory programs deemed to be “major federal actions” relevant to mining, thus triggering NEPA environmental reviews. Section 402 requires National Pollutant Discharge Elimination System (NPDES) permits for the discharge of pollutants into waters of the United States, such as disposal of mining-related waters and control of seeps from mine tailings impoundments.<sup>65</sup> Most U.S. states, including Alaska, have been authorized by the Environmental Protection Agency (EPA) to administer and enforce the Section 402 pollutant discharge programs in those states.

Section 404 of the CWA is another key federal permit for mines and is required to dispose of dredge and fill material into waters of the United States. This permit is administered by the U.S. Army Corps of Engineers, and triggers NEPA review.<sup>66</sup>

A survey of Alaska mines indicates that larger proposed new mines and mine expansions are almost always subject to NEPA review in the form of an EIS due to stringent permit requirements under Sections 402 and 404. For example, in November 2020, a NEPA EIS was completed for the proposed Pebble copper-gold-molybdenum mine located in the Bristol Bay region of southwestern Alaska and which resulted in the denial of a Section 404 permit by the U.S. Army Corps of Engineers.<sup>67</sup> Another EIS was completed in 2018 for the proposed Donlin gold mine in western Alaska.<sup>68</sup>

Supplementary NEPA environmental impact statements have been required for expansions of operating mines over the past decade or so, including:

- *Red Dog* – Extension of the open-pit Red Dog lead-zinc mine (Aqqaluk) in northwestern Alaska, which has an additional area of disturbance of 245 acres (605 hectares);<sup>69</sup>
- *Green’s Creek* – The North Extension of the Green’s Creek mine (silver, lead, zinc, gold) in the Tongass National Forest in southern Alaska would generate an additional 4 to 5 million cubic yards of acid-generating tailings and waste rock, and would have an increased tailings disposal area of 127 acres (314 hectares);<sup>70</sup> and

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<sup>64</sup> 33 U.S.C. §§ 1251-1388.

<sup>65</sup> 33 U.S.C. § 1342.

<sup>66</sup> 33 U.S.C. § 1344.

<sup>67</sup> U.S. Army Corps of Engineers, *Final Environmental Impact Statement for the Pebble Limited Partnership’s application to discharge fill material into waters of the United States for the purpose of developing a copper-molybdenum-gold mine project in the Bristol Bay region of Alaska*. [www.pebbleprojecteis.com](http://www.pebbleprojecteis.com).

<sup>68</sup> U.S. Army Corps of Engineers, *Final Environmental Impact Statement on the proposed Donlin Gold mine project*. [www.donlingoldmineeis.com](http://www.donlingoldmineeis.com).

<sup>69</sup> U.S. Environmental Protection Agency, *Supplemental Environmental Impact Statement Red Dog Mine Extension – Aqqaluk Project*, October 2009. [yosemite.epa.gov/oa/eab\\_web\\_docket.nsf/Filings%20By%20Appeal%20Number/ED1A2B5C2B3AA819852576FD0048A4EE/\\$File/Response%20to%20Petition%20Exhibit%202%20...28.04.pdf](https://yosemite.epa.gov/oa/eab_web_docket.nsf/Filings%20By%20Appeal%20Number/ED1A2B5C2B3AA819852576FD0048A4EE/$File/Response%20to%20Petition%20Exhibit%202%20...28.04.pdf).

<sup>70</sup> Forest Service USDA, *Notice of Intent to Prepare Supplemental Environmental Impact Statement - Tongass National Forest; Alaska; Greens Creek Mine North Extension Project*, October 9, 2020.



- *Kensington* - Expansion of the underground Kensington gold mine near Juneau would increase the mill throughput rate from 730,000 to 1,095,000 tonnes per year and increase tailings storage by raising the height of a tailings dam by 36 feet and constructing a Back Dam of 40 feet in height. The area of disturbance would increase by 85.4 acres (211 hectares).<sup>71</sup>

Expansions of the Fort Knox and Pogo mines were not subject to NEPA environmental impact statement requirements likely due to their earlier initial permitting. The Fort Knox mine near Fairbanks was permitted in 1994 to process between 36,000 and 54,000 tons of ore per day. Fort Knox received an environmental assessment at that time but not a NEPA EIS.<sup>72</sup> The much smaller Pogo underground gold mine near Fairbanks was permitted in 2003 based on a NEPA environmental impact statement and is processing between 2500 to 3500 tons of ore per day.

Three conclusions may be drawn. First, all of these Alaska mine projects were considered to have significant adverse effect. Second, two of the three proposed Alaska metal mine expansion projects subject to NEPA environmental impact statements would not have been subject to BCEAA environmental review if B.C.'s laws applied given that their projected area of disturbance is less than 600 hectares. The Red Dog mine expansion may have been subject to BCEAA environmental review given that the additional area of disturbance (605 hectares) slightly exceeds the regulated threshold.

A third conclusion is that all of the five B.C. mines and mine expansions that received no BCEAA environmental review would likely have been subject to NEPA EIS requirements if Alaska's laws applied given that all five discharge pollutants into waterways and thus would trigger *Clean Water Act* permitting, a major federal action under NEPA.

### 5.3 Washington

The State of Washington's environmental review process is set out in the *State Environmental Policy Act* (SEPA)<sup>73</sup> and SEPA Rules.<sup>74</sup> SEPA is modelled on the *National Environmental Policy Act* referred to above and supports *Clean Water Act* permitting similar to the role played by NEPA environmental reviews in Alaska.

SEPA's policy of maintaining and improving environmental quality is implemented primarily through procedural requirements designed to ensure that governmental agencies give proper consideration of environmental matters in making decisions on proposed actions by private parties or governmental entities. An environmental review is required for all agency actions,

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[www.federalregister.gov/documents/2020/10/09/2020-22440/tongass-national-forest-alaska-greens-creek-mine-north-extension-project](http://www.federalregister.gov/documents/2020/10/09/2020-22440/tongass-national-forest-alaska-greens-creek-mine-north-extension-project).

<sup>71</sup> Forest Service USDA, *Final Supplemental Environmental Impact Statement, Plan of Operations Amendment 1 for the Kensington Mine*, June 29, 2011. [www.fs.usda.gov/nfs/11558/www/nepa/110916\\_FSPLT3\\_5643919.pdf](http://www.fs.usda.gov/nfs/11558/www/nepa/110916_FSPLT3_5643919.pdf).

<sup>72</sup> Fort Knox Mine Environmental Assessment. [dnr.alaska.gov/mlw/mining/large-mines/fort-knox/archive](http://dnr.alaska.gov/mlw/mining/large-mines/fort-knox/archive).

<sup>73</sup> R.C.W. c 43.21C.

<sup>74</sup> W.A.C. c 197-11.

such as permitting and funding, unless a categorical exemption applies. SEPA Rules do not appear to include any categorical exemptions specific to the mining industry, perhaps because Washington currently has only one operating metal mine (Buckthorn). Several other mines are permitted but not operational.

The SEPA “threshold determination” is the decision as to whether the proposed project is likely to cause a significant adverse environmental impact for which mitigation cannot be easily identified.<sup>75</sup> The SEPA Rules state that the term “significant” “means a reasonable likelihood of more than a moderate adverse impact on environmental quality.” In evaluating a proposal, the lead agency reviews the SEPA Environmental Checklist and other information and may consider any comments received from the public or other agencies through consultations or other means.

If significant impacts are likely, a Determination of Significance (DS)<sup>76</sup> is issued and the environmental impact statement process is started. If there are no likely significant adverse environmental impacts, a Determination of Non-significance (DNS) is issued.<sup>77</sup>

The Buckhorn gold mine (originally the Crown Jewel mine project) in northeastern Washington was subject to a 1997 environmental impact statement jointly led by the U.S. Forest Service and Washington State Department of Ecology.<sup>78</sup> More recently, an environmental impact statement was prepared for the Buckhorn Access Project, which was proposed to provide the proponent Crown Resources with access to their private lands within the Okanogan and Wenatchee National Forests to expand mine production.<sup>79</sup> Water pollution from the Buckhorn has been an ongoing concern for citizens led by the Okanogan Highlands Alliance.

A determination of significance was issued for the proposed 2015 reactivation of the Old Cleveland mine located near Hunters in eastern Washington. The Old Cleveland mine was a lead-silver mine extracting ore on a 17 acre site using surface mining methods. Existing infrastructure was to be used in the reactivation. A five-acre parcel was to be mined down to 40 feet below the collar shaft before surface mining was initiated. Excavated ore was to be stockpiled on-site for truck transport to an off-site refining facility, with no refining or processing to be carried out on-site.

Environmental concerns with the proposed mine reactivation related to the mountainous local topography and proximity to a tributary of the North Fork of Hunter Creek. This project is an interesting comparable because unlike B.C.’s Copper Mountain and Yellow Giant, the Old Cleveland reactivation was subject to preparation of an environmental impact statement under

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<sup>75</sup> *Ibid* c 197-11-330.

<sup>76</sup> *Ibid* c 197-11.360.

<sup>77</sup> *Ibid* c 197-11.340.

<sup>78</sup> U.S. Environmental Protection Agency, *Record Of Decision For The Final Environmental Impact Statement, Crown Jewel Mine Okanogan County Washington*, January 1997. [nepis.epa.gov](http://nepis.epa.gov).

<sup>79</sup> Forest Service USDA, *Final Environmental Impact Statement Buckhorn Access Project*. [www.fs.usda.gov/nfs/11558/www/nepa/12577\\_FSPLT1\\_020869.pdf](http://www.fs.usda.gov/nfs/11558/www/nepa/12577_FSPLT1_020869.pdf).

SEPA even though operations had previously been permitted and no significant expansion of operations was proposed.

Recognizing that Washington currently hosts only one operating metal mine, a tentative conclusion may still be drawn that the Old Cleveland and Buckhorn mine examples indicate that the Washington's SEPA environmental review process is more inclusive for proposed mines than that of the BCEAA as the five B.C. mine examples would almost certainly have passed the threshold determination of potential for significant environmental effects.

#### 5.4 Northern Quebec

The *Environmental Quality Act* (EQA)<sup>80</sup> establishes environmental review regimes for different regions in Quebec, including environmental review processes for Eeyou Istchee (northern Quebec south of the 55<sup>th</sup> parallel)<sup>81</sup> and Nunavik (northern Quebec north of the 55<sup>th</sup> parallel).<sup>82</sup>

The EQA establishes a Review Committee<sup>83</sup> and Evaluating Committee<sup>84</sup> to conduct the environmental review process in Eeyou Istchee, and the Kativik Environmental Quality Commission to conduct the environmental review process in Nunavik. The environmental review process in both regions is conducted according to principles defined in the EQA, which include protection of Indigenous hunting, fishing and trapping rights, protection of Indigenous values, and protection of environmental, economic and social values.<sup>85</sup>

Schedule A of the EQA provides that all mining development projects, including changes to existing mines are required to undergo an environmental and social assessment: "The projects listed below are automatically subject to the assessment and review procedure contemplated in sections 153 to 167 and 187 to 204: (a) all mining developments, including the additions to, alterations or modifications of existing mining developments".<sup>86</sup> In recent years, the Kativik Environmental Quality Commission has conducted environmental reviews, or is reviewing, several new mines or mine expansions including: Sivumut (Raglan Mine Phases II and III); Méquillon UG1 Deposit Extension (Nunavik Nickel Project); and Tailings Management Project of the Expo Mine (Nunavik Nickel Project).<sup>87</sup>

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<sup>80</sup> *Environmental Quality Act (Loi sur la qualité de l'environnement)*, L.R.Q. 1978, c Q-2.

<sup>81</sup> Eeyou Istchee is the territory of Quebec Cree First Nations delineated in the 1976 *James Bay and Northern Quebec Agreement* (JBNQA), which is a comprehensive claims agreement signed by the governments of Canada and Quebec and representative Inuit and Cree organizations. The *Environmental Quality Act* is the Quebec law that implements the environmental chapters of the JBNQA among other functions.

<sup>82</sup> Nunavik is the territory of Quebec Inuit delineated in the 1976 *James Bay and Northern Quebec Agreement*.

<sup>83</sup> *Ibid* above note 61 at s 151.

<sup>84</sup> *Ibid* at s 148.

<sup>85</sup> *Ibid* at s 152.

<sup>86</sup> *Ibid* at Schedule A(a).

<sup>87</sup> See the Kativik Environmental Quality Commission Registry for further information on these projects [ceek.org/en/jbnqa-environmental-and-social-protection-regime](http://ceek.org/en/jbnqa-environmental-and-social-protection-regime).

Schedule B of the EQA identifies projects that are automatically exempt from environmental review in northern Quebec. Only minor mining exploration projects are exempt: “(g) all testing, preliminary investigation, research, experiments outside the plant, aerial or ground reconnaissance work and survey or technical survey works prior to any project”.<sup>88</sup>

The above review indicates that development of all proposed new mines and mine expansions regardless of production capacity or significance of environmental impacts are legally subject to environmental review in northern Quebec. More significant mining exploration projects would also be subject to environmental review at least to the first stage of preliminary screening. Clearly, any of the five B.C. mines described above that received no environmental review would have been subject to environmental and social impact assessment process requirements if the laws governing northern Quebec mines applied.<sup>89</sup>

## 5.5 Northwest Territories

Environmental reviews of proposed mines in the Northwest Territories, are principally governed by the *Mackenzie Valley Resource Management Act* (MVRMA)<sup>90</sup> which regulates all stages of mining, including exploration, construction, operation and closure. The MVRMA establishes the Mackenzie Valley Environmental Impact Review Board<sup>91</sup> as the “main instrument in the Mackenzie Valley for the environmental assessment and environmental impact review of developments”.<sup>92</sup>

The MVRMA sets out three stages in the environmental impact assessment process: 1) preliminary screening conducted by land and water boards; 2) environmental assessment conducted by the Board; and 3) environmental impact review, conducted by an independent panel created by the Board. Projects that have not been exempted and that require environmental review are not necessarily required to go beyond the first stage of preliminary screening.

Any approval required for the carrying out of a development is not to be issued unless the environmental review process has been complied with.<sup>93</sup> Further, the term “development” is broadly defined to include: “any undertaking . . . that is carried out on land or water and includes an acquisition of lands pursuant to the *Historic Sites and Monuments Act* and measures

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<sup>88</sup> *Ibid* at Schedule B(g).

<sup>89</sup> The environmental review process in southern Quebec is also governed by the *Environmental Quality Act*, which uses a regulation to identify the categories or projects in this region that trigger an environmental review.<sup>89</sup> Under this regulation, triggered projects include a metal mine (other than a uranium and rare earth mine) with maximum daily extractive capacity equal to or greater than 2000 tonnes, which is higher than B.C.’s 75,000 tonnes per year threshold.

<sup>90</sup> S.C. 1998 c 25. Note that the Inuvialuit region has an environmental review regime separate from that of the other regions of the Northwest Territories.

<sup>91</sup> *Ibid* s 112.

<sup>92</sup> *Ibid* s 114(a).

<sup>93</sup> *Ibid* s 118(1).

carried out by a department or agency of government leading to the establishment of a park . . . subject to the *Canada National Parks Act* or the establishment of a park under a territorial law”.<sup>94</sup>

Exemption List Regulations have been issued under the MVRMA.<sup>95</sup> Provisions exempting mining exploration activities are limited to activities unlikely to be environmentally significant such as: “engineering tests undertaken to define the elements of a development, or alternatives necessary to determine the environmental impact of a development”.<sup>96</sup>

The Board is currently carrying out environmental assessments of mine projects including the Pine Point Mine Project, the Yellowknife Gold Project and the Howard’s Pass Access Road Upgrading Project.<sup>97</sup> In recent years, environmental assessments have been concluded for numerous new mine development and exploration projects.<sup>98</sup>

The above review indicates that development of all proposed new mines and mine expansions regardless of production capacity or significance of environmental impacts are legally subject to environmental review under the MVRMA. In conclusion, any of the five B.C. mines described above that received no environmental review and would not be subject to the 2018 BCEAA would have been subject to an environmental assessment or environmental impact review if the MVRMA applied.

## 6. International Laws and Standards

*The Government of British Columbia is committed to working closely with our partners in B.C. and in the United States to ensure water quality standards in shared watersheds.*

*- B.C. Premier John Horgan, July 19, 2019<sup>99</sup>*

### 6.1 Introduction

Does British Columbia in fact work closely with Alaska, Washington and other jurisdictions in ensuring that environmental reviews of new metal mines and mine expansions ensure water quality in shared watersheds? Compliance with key international laws and standards, summarized below, are a key first step to achieving a close working relationship, in addition to just being a good neighbour.

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<sup>94</sup> *Ibid* s 111(1).

<sup>95</sup> SOR/99-13 December 16, 1998.

<sup>96</sup> *Ibid* s 15.

<sup>97</sup> See the Mackenzie Valley Environmental Impact Review Board’s public registry at [reviewboard/registry.ca](http://reviewboard/registry.ca) for information on these assessments.

<sup>98</sup> *Ibid*.

<sup>99</sup> *Ibid* above note 1 at 1.

## 6.2 Boundary Waters Treaty

The *Boundary Waters Treaty* of 1909 between Canada and the United States provides that “...the waters herein defined as boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other.”<sup>100</sup>

The International Joint Commission (IJC) is established by the *Boundary Waters Treaty* to prevent and resolve disputes over transboundary waters. Comprised of three commissioners from Canada and three from the U.S., the IJC examines shared water uses, investigates transboundary issues, and recommends solutions. Under the Treaty, the United States or Canada may refer a boundary waters matter to the IJC for review.<sup>101</sup>

Metal mine pollution of transboundary rivers that flow from B.C. into Washington and Alaska may constitute a breach of Canada’s international legal obligations where harm to the health of Americans or their property can be shown. A critical step in meeting those obligations and claiming world-class leadership is for B.C. (or Canada) to carry out an environmental review of any proposed new metal mine or mine expansion that would potentially discharge pollutants into transboundary rivers shared with the United States, especially Washington and Alaska.

In 2016, British Columbia and Alaska signed a transboundary waters agreement establishing a bilateral working group of officials to collect and share water quality data as well as stating a commitment to “look for opportunities to build on and enhance participation in environmental assessments and permitting relating to mines and development.”<sup>102</sup> Publicly available working group minutes indicate that the governments share information on mine projects that may adversely affect transboundary water quality, but provision of opportunities for Alaska and Alaskans to participate in environmental reviews and permitting of B.C. mines appears to be absent.

No similar agreement between Washington and British Columbia has apparently been signed despite major concerns in Washington concerning B.C. mine pollution of transboundary rivers such as the Skagit and Similkameen.<sup>103</sup> As recently as October 29, 2021 and as mentioned, B.C. issued a mining permit to Gold Mountain Mining for its Elk Gold mine 57 km south of Merritt in

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<sup>100</sup> International Joint Commission, *Treaty Between the United States and Great Britain Relating to Boundary Waters and Questions Arising Between the United States and Canada*, January 11, 1909 at Art. IV. [www.ijc.org/en/who/mission/bwt](http://www.ijc.org/en/who/mission/bwt).

<sup>101</sup> *Ibid* at Art. IX.

<sup>102</sup> *Statement of Cooperation on Protection of Transboundary Waters* between the State of Alaska and the Province of British Columbia, October 7, 2016. [www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/mineral-exploration-mining/documents/compliance-and-enforcement/20161006-statement-of-cooperation-final.pdf](http://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/mineral-exploration-mining/documents/compliance-and-enforcement/20161006-statement-of-cooperation-final.pdf).

<sup>103</sup> Note that the 1964 *Columbia River Treaty* between Canada and the United States sets out cooperative measures to secure hydroelectric power development and flood control in the Columbia River Basin but does not address transboundary water pollution.

the Similkameen watershed without an environmental review and little public engagement in B.C. let alone in Washington.<sup>104</sup>

### **6.3 Convention on Environmental Impact Assessment in a Transboundary Context**

Canada is a Party to the 1991 UNECE *Convention on Environmental Impact Assessment in a Transboundary Context* (Espoo Convention); the United States is not a Party as it has signed but not ratified the Espoo Convention.<sup>105</sup> Canada has various environmental review obligations under the Espoo Convention with respect to listed activities likely to cause a significant adverse transboundary impact in affected Party countries.<sup>106</sup> Party of origin obligations include:

- Furnishing environmental impact assessment documentation of a listed activity to an affected Party;<sup>107</sup>
- Entering into consultations with an affected Party concerning the potential transboundary impact of the proposed activity and measures to reduce or eliminate its impact;<sup>108</sup>
- Providing an opportunity to the public of the affected Party to participate, and ensure that this opportunity is equivalent to that provided to the public of the Party of origin;<sup>109</sup> and
- Taking due account of the outcome of the environmental impact assessment in the final decision on the proposed activity.<sup>110</sup>

The List of Activities subject to the Espoo Convention include: “Major mining, on-site extraction, and processing of metal ores or coal.”<sup>111</sup>

Given that the United States is a signatory but not a Party to the Espoo Convention, Canada is not legally bound to honour these environmental review obligations with respect to proposed mines in Canada likely to cause significant adverse environmental impacts in the United States. Canadian federal, provincial and territorial governments do have such legal duties with respect to other Parties to the Convention such as Denmark (Greenland) and France (St. Pierre and Miquelon).

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<sup>104</sup> Access Wire, “Gold Mountain Receives Its Mining Permit from The Ministry of Mines”, November 1, 2021. [www.accesswire.com/viewarticle.aspx?id=670614&token=PTXFCCCN20HXP0B64001](http://www.accesswire.com/viewarticle.aspx?id=670614&token=PTXFCCCN20HXP0B64001).

<sup>105</sup> UNECE, *Convention on Environmental Impact Assessment in a Transboundary Context*, February 25, 1991. [unece.org/DAM/env/eia/documents/legaltexts/Espoo\\_Convention\\_authentic\\_ENG.pdf](http://unece.org/DAM/env/eia/documents/legaltexts/Espoo_Convention_authentic_ENG.pdf).

<sup>106</sup> Government of Canada, “Transboundary Impact Assessments: Espoo Convention”. [www.canada.ca/en/environment-climate-change/corporate/international-affairs/partnerships-organizations/transboundary-environmental-impact-assessments.html](http://www.canada.ca/en/environment-climate-change/corporate/international-affairs/partnerships-organizations/transboundary-environmental-impact-assessments.html).

<sup>107</sup> *Ibid* above note 78 at Art. 4.

<sup>108</sup> *Ibid* at Art. 5.

<sup>109</sup> *Ibid* at Art. 2.6.

<sup>110</sup> *Ibid* at Art. 6.

<sup>111</sup> *Ibid* at List of Activities Item 14.

For example, the Nunavut Impact Review Board required an assessment pursuant to the Espoo Convention of the impacts on Greenland of the Phase 2 expansion of the Mary River Iron Ore Mine on northern Baffin Island. Baffinland Iron Mines Corporation (Baffinland) was seeking to expand the Mary River Mine to increase ore production, construct a new railway line, expand existing port facilities, and increase the shipping season and number of vessels called to port annually. The additional ore carriers would travel through Baffin Bay, Davis Strait and Labrador Sea, waters separating Baffin Island and Labrador from Greenland.

Baffinland prepared a report examining transboundary impacts in accordance with the Espoo Convention in order to provide Denmark with environmental impact assessment documentation to facilitate participation in the regulatory process.<sup>112</sup> Valued ecosystem components (VECs) that were assessed included: climate change (related to greenhouse gas emissions); migratory birds and habitat; marine habitat and biota; and marine mammals. The Report concluded that “the risk of transboundary impacts occurring because of Phase 2 Proposal activities is very low and any transboundary effects in Greenland waters would be not significant.”<sup>113</sup> Nonetheless, the key point is that Greenlanders were afforded the opportunity to participate in the Nunavut environmental review process of the Mary River mine expansion project.

Although the United States is not a party to the Espoo Convention, affected Americans should be afforded the same opportunities as Greenlanders to participate in environmental reviews of Canadian projects that may have significant adverse transboundary effects in the United States. Any Canadian province such as B.C. claiming to be a world leader in environmental reviews of proposed new mines and mine expansions should comply with the Espoo Convention as a best practice. However, it appears that British Columbia has not even determined whether Copper Mountain or other B.C. mines that discharge pollutants into rivers flowing into the United States should undergo environmental reviews that reflect Canada’s Espoo Convention commitments.

## 6.4 Conclusions

Compliance with established international laws and standards (*Boundary Waters Treaty*, Espoo Convention) apparently has not figured in British Columbia decisions to refrain from conducting environmental reviews of proposed mines such as Copper Mountain. Premier Gold or Elk Gold located upstream of Alaska and Washington or in environmental reviews of B.C. mines that are assessed. To that extent at least, British Columbia cannot credibly claim to be a world leader in environmental reviews of mines.

## 7. Conclusions and Recommendations

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<sup>112</sup> Baffinland Iron Mines Corporation, *Espoo Report: Phase 2 Proposal - Mary River Project*, January 2021, NIRB File No. 08MN053.

<sup>113</sup> *Ibid* at v.



The province of British Columbia is not yet a “world leader” in its environmental reviews of proposed new metal mines and mine expansions. British Columbia must resolve important deficiencies in order to catch up to leading American and Canadian jurisdictions in its environmental reviews of metal mine projects likely to have significant adverse environmental effects.

While the British Columbia *Environmental Assessment Act* (BCEAA) includes important amendments improving engagement of Indigenous communities and public participation, the regulations and policies under the BCEAA mean that significant adverse effects of new metal mines and mine expansions that would be reviewed in other jurisdictions such as Alaska, Washington, Northwest Territories and northern Quebec are not reviewed by British Columbia. British Columbia’s policy limiting environmental reviews to so-called “major” projects regardless of the significance of the adverse environmental effects of projects deemed not to be major would itself rebut any claim of world leadership by B.C.

Further, British Columbia has not taken seriously its international legal obligations under the *Boundary Waters Treaty* nor other international standards such as the Espoo Convention, with the result that significant adverse environmental effects on downstream jurisdictions such as Alaska and Washington are not addressed effectively.

Recommendations to improve environmental reviews of new metal mines and mine expansions in British Columbia are that:

1. British Columbia revise the Reviewable Projects Regulation to ensure that *Environmental Assessment Act* review is required for:
  - All new metal mines, regardless of production capacity or disturbance area;
  - Any expansion of the approved production capacity or disturbance area of an existing mine that does not have an environmental assessment certificate; and
  - An expansion of a mine with an environmental assessment certificate where the approved expansion would disturb more than an additional 50 percent of the land disturbed by the existing mine;
2. British Columbia adopt a policy committing British Columbia to compliance with the *Convention on Environmental Impact Assessment in a Transboundary Context* to ensure that Americans affected by proposed B.C. metal mines assessed under the *Environmental Assessment Act* enjoy the same rights to participate in environmental reviews as Greenlanders affected by proposed Nunavut or Newfoundland and Labrador metal mines assessed by those jurisdictions;
3. Canada, in consultation with British Columbia, and the United States, in consultation with Alaska, Washington, Idaho and Montana, commence negotiations for a joint review of transboundary water pollution in these jurisdictions to ensure that boundary waters and waters flowing across the boundary are not polluted on either side to the injury of health or property on the other;

4. British Columbia and Canada should jointly fund and provide technical support to B.C. First Nations that wish to negotiate collaboration agreements similar to the B.C. - Lake Babine First Nation agreement that would provide for Indigenous-led environmental reviews of proposed metal mines; and
5. British Columbia and Canada should jointly fund and provide technical support to First Nations proposing to conduct Indigenous-led environmental reviews of proposed new mines or mine expansions in the absence of a collaboration agreement. Such funding and technical support should be available for Indigenous-led environmental reviews, especially for those that are not subject to the B.C. *Environmental Assessment Act* or the federal *Impact Assessment Act*.