

University of Victoria Environmental Law Centre



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Context

Mining has a long history in British Columbia, and it continues to play an important role in many BC communities. Mining can, however, also cause catastrophic and long-lasting impacts to fish, water, wildlife and human health. The industry can also impose massive economic liabilities on taxpayers if mining laws are not strong enough. Mines in BC need careful regulation to ensure that mining companies adopt sound environmental practices and pay for their pollution costs.

In recent years, it has become clear that BC's regulatory system for mining is in urgent need of comprehensive reform. A growing volume of evidence of systemic failures in the current system includes:

- The 2014 Mount Polley Mine disaster—which deposited an estimated 10 thousand
 Olympic-sized swimming pools-worth of mine waste into one of the most
 productive salmon systems in the Fraser Watershed—and has resulted in zero fines
 or charges against the company;
- The Auditor General's devastating 2016 report that highlighted critical systemic shortcomings in BC's compliance and enforcement system for mining;
- Confirmation that taxpayers are liable for more than \$1 billion in mine cleanup costs across BC;
- The discovery that government did not inspect a closed Jordan River mine for over 20 years—allowing the undetected ongoing destruction of a once-productive salmon river;
- Growing public awareness of the devastating impact mining has on fisheries in various BC watersheds, threatening entire aquatic ecosystems and Indigenous cultures;
- New research showing BC's placer mining rules endanger rivers and streams; and
- Growing discontent with laws based on antiquated colonial thinking that still
 prioritizes mining over other land uses and interests by authorizing prospectors
 to stake mining claims in environmentally sensitive areas, on private land without
 landowner permission, and in First Nations' traditional territories without their free,
 prior and informed consent.

The serious shortcomings of British Columbia's mining regulatory regime are now clearly established. These regulatory problems undermine public confidence in government's ability to protect the public interest and to ensure that companies pay the costs of their pollution. The time for reform is now—we cannot afford to wait while environmental and financial risks multiply.

The following set of recommendations for reform of BC's mining laws are intended to inform those who are concerned about mine impacts, and to spark discussion and debate about how to improve regulation of this industry. We hope that they serve as a resource to support these critical discussions and debates amongst Indigenous and non-Indigenous governments, the mining industry, community groups and environmental organizations.

Summary Recommendations

Environmental Assessment

- 1. RECOMMENDATION: Fully implement and legislate A Blueprint for Revitalizing Environmental Assessment in British Columbia
- RECOMMENDATION: Require environmental assessments for all mines; for mining exploration activities when requested by First Nations or local communities; and for major expansions of existing mines.
- 3. RECOMMENDATION: Implement regulations to ensure that the evidence in the environmental assessment process is balanced, objective, and thoroughly peer-reviewed; that funding for participants in environmental assessments is ample and stable; that needed Regional and Strategic Assessments are effectively implemented; and that perpetual-care costs are fully considered in the assessment of all mines.

Mineral Tenure

- 4. RECOMMENDATION: Adopt a discretionary mineral tenure regime that incorporates a broad suite of values and interests, and ensures that in issuing tenures, decision-makers:
 - · Uphold Indigenous title, rights and interests;
 - Respect community and regional land-use designations and planning processes;
 - Consider the cumulative watershed impacts of industrial activities; whether lands are likely to be protected in the future; the track records of applicants; and other relevant factors.
- RECOMMENDATION: Require landowner consent for mining activities on private property and enable landowners to place requirements on exploration or mining activities as conditions of their consent.
- 6. RECOMMENDATION: Require that mining exploration and development activities conform with Indigenous, local, and regional land-use plans and restrict mining activity where there is no such plan in place.
- 7. RECOMMENDATION: Enable (at the request of Indigenous or local governments) revocation of exploration and mineral development rights that are inconsistent with land-use plan designations.
- 8. RECOMMENDATION: Mandate "no-go zones" to protect all designated Old Growth Management Areas, Wildlife Habitat Areas, domestic-use watersheds, fisheries-sensitive watersheds, and other sensitive areas from mining activities.
- 9. RECOMMENDATION: Ensure that no mining or exploration activities can be approved without the free, prior, and informed consent of affected Indigenous peoples.

Indigenous Governance & Mining

- 10. RECOMMENDATION: Ensure that no mineral tenuring, mining exploration, siting, or other activities occur without the free, prior, and informed consent of affected Indigenous communities.
- 11. RECOMMENDATION: Establish consent-based government-togovernment processes for determining the appropriateness of specific locations for mineral development *prior* to environmental assessment.
- 12. RECOMMENDATION: Establish government-to-government relationships for seeking, evaluating and earning the continued consent of First Nations governments for any mining activities, including staking claims, within their traditional territories.
- 13. RECOMMENDATION: Co-develop processes with Indigenous Nations to seek agreement on ecological standards, watershed plans, cumulative watershed assessments, and community-based monitoring for their territories.
- 14. RECOMMENDATION: Pursuant to government-to-government agreements, establish legally enforceable ecological and social standards or targets for each watershed or traditional territory based on the Indigenous Nations' priorities, knowledge and values.
- 15. RECOMMENDATION: Embed those standards in watershed plans, cumulative watershed assessments, and provincial laws, orders, permits and approvals.

- 16. RECOMMENDATION: Enable Indigenous Nations to undertake comprehensive watershed planning that includes zoning, land and water use parameters, connected protected areas, and no go and buffer zones.
- 17. RECOMMENDATION: Adopt Indigenous Nations' watershed plans into operating agreements and the provincial regulatory regime to ensure that mining and other natural resource activities are only approved if they align with these plans.
- 18. RECOMMENDATION: Create provisions in provincial law to retire mineral rights if they are inconsistent with Indigenous Nations' land use plan designations.
- 19. RECOMMENDATION: Partner with Indigenous Nations to create joint assessment and monitoring procedures and forums that generate standards for data and a venue for ongoing adaptive management of traditional territories.
- 20. RECOMMENDATION: Ensure that BC's new Environmental Assessment regime, regulations and approach include scoping for all new proposed activities and cumulative environmental and social impact of all activities in a watershed—so that parties can evaluate both the project-specific incremental effects and cumulative load on the watershed.
- 21. RECOMMENDATION: Link cumulative effects' assessments to land use plans and ecological standards for Indigenous Nations' territories so projects will be rejected at the outset if they would offend established watershed zoning and standards.

- 22. RECOMMENDATION: Establish and fund Indigenous-led community-based watershed monitoring programs through government-to-government agreements.
- 23. RECOMMENDATION: Develop data collection protocols and train community-based monitoring staff so that data generated locally can be used for management, governance, and statutory decision making.

Waste Disposal & Management

- 24. RECOMMENDATION: Establish a comprehensive plan to safely retire at least 60 active mine tailings dams, as recommended by government's Expert Panel.
- 25. RECOMMENDATION: Prohibit wet tailings impoundment unless it can be demonstrated through a risk assessment process that wet tailings impoundment poses less long-term risk (environmental, financial, and public safety) than a dry tailings approach.
- 26. RECOMMENDATION: Where wet tailings impoundments are in use, require dry closure (e.g. draining) when mining operations cease—unless it can be demonstrated through a risk assessment process that long-term maintenance of a wet tailings impoundment poses less risk (environmental, financial, and public safety).
- 27. RECOMMENDATION: Ensure that public safety, environmental safety, and economic safety are the determinative factors in governing what tailings disposal system will be implemented.

- 28. RECOMMENDATION: Require that financial feasibility studies conducted for proposed mines and waste disposal systems take into account the full long-term life cycle costs of facilities—and include externalities such as long-term costs/risks to the environment, industry and taxpayers, and public safety.
- 29. RECOMMENDATION: Require and apply the strictest and most rigorous standards when tailings dams are unavoidable.
- 30. RECOMMENDATION: Require that all mines in BC comply with the IRMA standards, or better, for Waste and Materials Management.
- 31. RECOMMENDATION: Prohibit disposal of mining wastes into rivers, lakes and oceans.

Closure, Reclamation & Abandoned Mines

- 32. RECOMMENDATION: Require that companies provide full security for independently reviewed reclamation costs before permits are issued to begin mining operations. For existing mines, require full security for reclamation costs within two years.
- 33. RECOMMENDATION: Enact measurable and enforceable reclamation criteria that meet or exceed the international standards set in IRMA's Standard for Responsible Mining.
- 34. RECOMMENDATION: Ensure timely independent review of the adequacy of site reclamation and regular public reporting of review findings.

- 35. RECOMMENDATION: Require at least annual inspection of all closed mines for geotechnical issues, ground and surface water contamination and revegetation.
- 36. RECOMMENDATION: Require and support local and stakeholder engagement on the content of mine closure and reclamation plans, including proposed changes to those plans and the monitoring of their effectiveness.
- 37. RECOMMENDATION: Establish a rehabilitation fund for old polluting mines that active mining companies contribute to proportionally, based on the relative size of their total cleanup and reclamation liabilities.

Water Protection

- 38. RECOMMENDATION: Adopt the *IRMA Standard for Responsible Mining* water management standards as minimum requirements in BC's mining laws, including full consultation with communities and stakeholders on critical water-related issues, with third party independent reviews.
- 39. RECOMMENDATION: Prohibit mines that are likely to require perpetual water treatment unless the mine meets the exceptional circumstances set out in the *IRMA Standard for Responsible Mining*.
- 40. RECOMMENDATION: Strengthen mining exploration rules to protect water.

Monitoring & Enforcement

- 41. RECOMMENDATION: Establish an independent mining compliance and enforcement unit outside the jurisdiction of the Ministry of Energy, Mines and Petroleum Resources with a mandate to protect the environment.
- 42. RECOMMENDATION: Require regular public posting of all mine environmental monitoring data and compliance and enforcement information in easily understandable formats.
- 43. RECOMMENDATION: Require that the responsible minister(s) provide written reasons for decisions to deny or approve mining activities.
- 44. RECOMMENDATION: Ensure sufficient resources, staff and expertise to effectively enforce the law at BC mines.
- 45. RECOMMENDATION: Implement a funding mechanism that ensures mining companies contribute their fair share towards a robust monitoring and enforcement regime.
- 46. RECOMMENDATION: Mandate clear risk-based inspection policies for all mines (including closed and abandoned mines) – and legislate mandatory minimum inspection schedules and standards that meet or exceed international best practices.
- 47. RECOMMENDATION: Develop policies, procedures, and tools to systematically track compliance with regulations, permit conditions, environmental assessment certificate conditions and other regulatory requirements.

- 48. RECOMMENDATION: Establish a modern, progressive regime of fines and penalties to deter illegal and environmentally damaging mining practices.
- 49. RECOMMENDATION: Mandate cumulative fines for repeat noncompliance, a prohibition on future authorizations for serial offenders, and daily fines for continuing offences.
- 50. RECOMMENDATION: Enable and fund Indigenous-led monitoring and enforcement programs for mining activities.
- 51. RECOMMENDATION: Require the establishment of citizens' advisory councils for proposed and existing mining projects; and empower the councils to develop, implement, and monitor long term health, safety and environmental plans.
- 52. RECOMMENDATION: Enact robust whistleblower protections to protect private sector whistleblowers, including mineworkers, contractors and others who report unlawful or unethical actions that endanger public health, safety, and the environment.
- 53. RECOMMENDATION: Enable private prosecutions and/or enact citizen suit provisions for environmental violations.

Placer Mining

54. RECOMMENDATION: Enact a clear minimum riparian setback requirement of at least 30 metres for any placer mining activities.

- 55. RECOMMENDATION: Ensure placer mining development proceeds only if it has the free, prior and informed consent of affected First Nations.
- 56. RECOMMENDATION: Require environmental assessments for proposed placer mining operations, including the assessment of cumulative impacts of multiple placer mines within the same watershed.
- 57. RECOMMENDATION: Require effective monitoring, inspection, enforcement, and reporting for placer mining, including:
 - government tracking of mercury and other placer-related contaminants in BC's placer-mined watersheds;
 - annual inspections of all operating placer mines, and biennial inspections of closed mines until reclamation is complete and independently verified;
 - increased penalties to deter illegal practices, including escalating penalties for repeat offenders;
 - the collection and annual publication of relevant placer mining statistics, such as number and location of mines permitted, production volumes, reclamation and closure costs, the number of inspections and inspection results, and enforcement actions taken.
- 58. RECOMMENDATION: Remove the Chief Inspector's discretion over security requirements and require that all placer mines post full security that is based on defensible and independently verified calculations.
- 59. RECOMMENDATION: Repeal section 3(c)(i) of the *Placer Mining*Waste Control Regulation to give the Atlin region the same minimum protections from placer mining that the rest of the province enjoys.

- 60. RECOMMENDATION: Require assessment of the sedimentation and toxic chemical profile of BC watersheds where placer mining has occurred and designate areas where levels are below provincial health standards 'off-limits' to placer mining until a remediation plan is in place.
- 61. RECOMMENDATION: Develop strong rules to control the specific impacts of jade mining, including large boulder removal from streambeds and riparian areas.

Polluter Pays

- 62. RECOMMENDATION: Require mining companies to provide security for 100% of independently verified cleanup and reclamation cost estimates before operations begin.
- 63. RECOMMENDATION: Protect against the premature return of securities by mandating holdbacks and providing for public input and appeal opportunities for security release decisions.
- 64. RECOMMENDATION: Mandate regular public disclosure of the estimated liability and corresponding security amounts held by the province for each mine in BC.
- 65. RECOMMENDATION: Require that mining companies carry private insurance to fully cover the cost of unplanned but probabilistic events like tailings spills (i.e. beyond required securities for predicted cleanup and reclamation costs).
- 66. RECOMMENDATION: Establish a pooled industry fund to cover the costs of disasters that private insurers won't cover.

- 67. RECOMMENDATION: Establish an independent claims process to adjudicate disputes over third-party compensation for mine pollution impacts.
- 68. RECOMMENDATION: Expand the civil liability of mining companies to ensure that they pay the full cost of their pollution by:
 - Liberalizing the rules on legal standing to enable citizens to bring public nuisance cases without having to prove a personal, proprietary or pecuniary interest, or special damage—and without needing permission from the Attorney General; and
 - Enabling "citizen suits" where individuals can sue companies civilly to compel compliance from polluters who are violating the law—and can sue government bodies directly for failing to perform their statutory duties to protect the environment.
- 69. RECOMMENDATION: Revise pollution discharge fees so that they are defensibly proportionate to the environmental impacts and ecosystem costs associated with the discharge of specific pollutants.

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