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EVIDENCE BRIEF

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SSHRC's Imagining Canada's Future initiative mobilizes social sciences and humanities research to address emerging economic, societal and knowledge needs for Canada, and help guide decision-making across all sectors towards a better future. This evidence brief addresses the Future Challenge Area of: **Informing Best Practices in Environmental and Impact Assessments**.

Integrating socio-economic objectives for mine closure into impact assessment in Canada

About the project

Mine closure and remediation are often the longest and most complex phases of the mining cycle, but typically receive the least direct scrutiny during project assessments. As a result, large gaps exist in environmental and social impact assessment practices for mine closure and remediation. The particular knowledge and policy challenges associated with this final phase of the mining cycle include addressing long-term environmental and social impacts; financial securities for post-closure liabilities; post-remediation monitoring and relinquishment of closed site; and the often complicated regulatory arrangements surrounding operating versus abandoned mines.

This report highlights key issues and impacts of mine closure and remediation, particularly socio-economic impacts and community engagement, in closure planning and assessment.

It evaluates

- whether and how mine closure and remediation are incorporated into environmental and impact assessment processes in Canada;
- public participation in and oversight of mine closure and remediation through environmental and impact assessment processes; and
- the various regulations, policies and practices of mine closure and remediation, as reflected in actual closure plan documents.

It does so through a systematic literature review of international research and grey literature, using a targeted search of 20 databases addressing mine closure, remediation, public engagement and impact assessment. In addition, the report includes a detailed qualitative review of closure planning documents from selected major mineral developments in Northern Canada in relation to closure policy and regulation in these jurisdictions.

Key findings

- Mine closure and remediation are often the longest and most complex phase of the mining cycle, yet receive the least attention during project assessment and approval. There does not appear to be a clear relationship between impact assessment processes and closure plans, and there are significant gaps in the policies governing both. Impact assessment policies need to take better account of this phase by integrating remediation processes into impact assessment and incorporating detailed closure objectives and standards, public discussion of financial securities and an evaluation of potential post-mining uses.
- The long-term, even perpetual nature of post-mining impacts is a major sustainability challenge and contributes to cumulative impacts in extractive regions. Until recently, the various social and economic impacts of mine closure (such as unemployment, outmigration and capital disinvestment) were not effectively integrated into either project assessment or mine closure planning. The lack of policies setting out expectations and responsibilities for closure leaves communities dealing with its impacts on an ad hoc basis.



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- Impact assessment guidelines vary drastically between jurisdictions with respect to community engagement. The Northwest Territories and Nunavut are the only regions whose guidelines clearly state that communities must be directly involved in ongoing closure planning and decision-making. Knowledge and input from Indigenous communities is used inconsistently between projects and methods for community engagement are not clearly explained in the existing closure plans examined.
- Research into the role of impact assessment policy and practice for mine closure, remediation and public engagement is sparse and fragmentary. Research could focus on creating interdisciplinary linkages and standards to better address socio-economic dimensions. Future research is required to integrate and enhance knowledge of these issues and to make recommendations for impact assessment and closure policy and practice.

Policy implications

- The mitigation of social impacts of mine closure and remediation is poorly addressed in closure and remediation policy. Remediation plans need to include inter-generational environmental and socio-economic dimensions. Impact assessment needs to include specific regulations and evaluation for closure and remediation. Better guidance for the incorporation of socio-economic impacts of mine closure should be included in impact assessment legislation and guidelines.
- Community engagement and public scrutiny of closure plans—from the outset and during the project assessment phase—are crucial to equitable and effective closure and remediation practice. Processes for public consultation and engagement of community knowledge and social impacts in closure planning are vague and inconsistent. The public needs to be engaged throughout the life cycle of the mine, and community preferences and social outcomes need to be explicitly considered.
- Particular attention to the legacies of mining and mine remediation for Indigenous communities is required in the context of settler-colonial relations, as well as more recent practices of negotiated agreements. Impact assessment needs consider Indigenous knowledge or Inuit Qaujimaqatunqangit (as applicable) and community input.

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FURTHER INFORMATION:

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The views expressed in this evidence brief are those of the authors and not those of SSHRC, IAAC and the Government of Canada.

The Impact Assessment Agency of Canada (IAAC) is a federal body accountable to the minister of Environment and Climate Change. The IAAC delivers high-quality impact assessments that contribute to informed decision-making on major projects in support of sustainable development.

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