Mine Closure: A Canadian Perspective

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Modern Mine Closure: Tools for Companies and Governments
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Mine Closure: A Growing Priority

- An increasing number of mines globally are approaching the end of active production
- The social, environmental and economic impacts of improperly closed or abandoned mines are significant
- Interest in closure is increasing and effective policies and practices are a growing priority
Mine Closure in Canada

• Facts and figures
  o Between 2013 and 2017, 88 mines in Canada closed or suspended operations
  o By 2030, 80+ mines are projected to close
  o In 2018, 108 mining-related projects listed in Canada under construction or planned to begin construction within the next decade totalling $72B CDN in projected investment

• Roles and responsibilities for mine closure are shared
  o Provinces and territories manage mine closure and post-mining transition via legislation and regulations for permitting
  o Companies must submit mine closure plans and provide financial assurance
  o Federal investments in green mining innovation and collaboration on mine closure
  o Government efforts are complemented by industry, including the Mining Association of Canada’s *Towards Sustainable Mining: Mine Closure Framework*
Green Mining Innovation

• Water management
  – Development and application of novel and advanced water treatment options
  – Ecotoxicity to understand the behaviour of deleterious substances in the aquatic environment

• Waste management
  – Organic covers to stabilize tailings impoundments and produce secondary land use post-closure
  – Circular economy – *Mining Value from Waste*
National Orphaned / Abandoned Mines Initiative

• Brings together federal, provincial and territorial governments, industry, Indigenous communities and NGOs
  – Prevents future orphaned / abandoned sites
  – Rehabilitates existing orphaned / abandoned sites
  – Maintains a National Repository of Inactive Mines
• NOAMI priorities are being reimagined...

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International Efforts on Mine Closure

- Canadian leadership on mine closure standards and best practices
  - IGF on Mining, Minerals, Metals and Sustainable Development
  - Canadian International Resources and Development Institute
  - APEC Mining Task Force and the APEC Mine Closure Checklist for Governments
  - ISO/TC 82/SC 7 Mine Closure and Reclamation Management
In your perspective…

What is the most significant challenge faced by industry and regulators with respect to mine closure?

- Unknown residual risks and associated liabilities
- Socio-economic development post closure
- Long-term water treatment and management
- Long-term stability of landforms
- Uncertainty around regulatory requirements
- Others… ?