Deficiencies in Post-Mt Polley Reclamation Changes:

- BC Financial Surety for Mines
- BC Mine Reclamation Code Changes

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Facts to Consider Post-Mt Polley

- **BC has an unfunded total reclamation liability of $1.2 billion***
- **BC intends to reduce, but not eliminate, this liability over the next 8 years****
- **BC still intends to continue to utilize a risk-based approach**:
  - A risk-based approach means a company does not need to have the entire amount of the financial surety in collectable instruments, part of the surety is supplied by a corporate guarantee
- **BC has no financial surety for a catastrophic event at a mine**
- **Mt Polley Expert Panel predicted 2 failures every 10 years in BC**

BC Utilizes A Risk-based Approach

A risk-based approach:

- Creates unacceptable risk for the public if a mine/company is not evaluated properly – like Imperial Metals/Mt Polley
- Creating winners and losers in mining (anti-free market)
- Requires a program that is unnecessarily complicated and resource intensive (over regulation and expensive to implement)
- Is not justified by the cost savings to the companies, the costs of administration, or the increased risk to the public
- BC has claimed it needs to allow corporate guarantees to stay competitive. Corporate guarantees are not necessary to keep BC mines competitive - if anything it creates a competitive advantage for regulatory jurisdictions that use this approach
- Is an approach favored (but not exclusively) in Canadian Provinces and Australian States, but much of the world has already, or is moving toward, requiring 100% reclamation at the time of mining.

SURVEY OF REGULATORY APPROACHES TO FINANCIAL ASSURANCE

❖ **Canada**

- British Columbia – risk based
- Alberta – risk based - unfunded liability of $19.3 billion* (FA info confidential)
- Manitoba – based on financial strength
- Nova Scotia – minister has wide discretion (FA info confidential)
- Ontario – based on financial strength (FA info confidential)
- Saskatchewan – corporate guarantees
- Quebec – 100% 2-yr payment period (public disclosure)
- Yukon – 100%
- Nunavut – 100% (DIAND)
- Northwest Territories – 100% (DIAND)

❖ **Australia**

- Western Australia – rehabilitation fund contribution, optional bond (FA info confidential)
- Victoria – risk based, moving to 100%
- Northern Territories – 100%
- New South Wales – coal (no info available)
- Queensland – minister has wide discretion
- South Australia – rehabilitation fund contribution, optional bond
- Tasmania – minister has wide discretion

❖ **US**

- BLM / USFS – 100%
- Most states – 100%
  - Alaska & Nevada – can use corporate guarantees

❖ **Chile** – 100% (phased payment)

❖ **European Union** – polluter-pays principle (details left to individual countries)

❖ **Ghana** – 100%

❖ **South Africa** – 100%

Post-Mt Polley BC Reclamation Code Changes

DAM SAFETY

"Safety attributes should be evaluated separately from economic considerations, and cost should not be the determining factor." (Mt Polley Expert Panel)

❖ **Code:**

- safety versus cost in tailings dam design is not addressed

❖ **Code Guidance Document**

- Alternatives Assessment:
  - *Physical stability is of paramount importance, and options that require a compromise to physical stability should be discarded"*
- Risk Assessment:
  - *"Elements for consideration should be selected as appropriate for the scope and complexity of the structure and the site, and may include the following consequence categories:*
    - ...
    - ***Safety*** *and health*
    - ***Financial Impacts***

Post-Mt Polley BC Reclamation Code Changes

WATER

"Eliminate surface water from the impoundment" (Mt Polley Expert Panel)

- **Code:** has no requirement for minimizing water in the tailings on closure
- **Guidance Document:** requires an "*effort to reduce and remove water from containment within tailings facilities should be made*" and that "*alternatives to water covers should be considered in planning stages*." (emphasis added)
- The **Code** and **Guidance Document** rely on site-specific considerations, which include cost.
- **All sulfide-mines operating or proposed in the Transbounday Region utilize wet closure.**

Post-Mt Polley BC Reclamation Code Changes

- **Draft Code Part 10 published 20Jul16**
  - CSP2 submitted 19 pages of comments on the July, 2016, Draft Code & Guidance Document to MEM in September, 2016
- **Final Code Part 10 published 28Feb17**
  - Only grammar & formatting changes from 20Jul16 Part 10
  - No response to comments
- **Code Guidance Document**
  - Identical to July 2016 version
- **Red Chris Final Operating Permit issued 28Feb17**
  - $12 million financial surety required, but liability is probably 3-4 times that amount
- **KSM – permitted but construction has not commenced**
  - EIS predicts the copper and lead could exceed AWQS at border
  - Requires post-closure treatment of 171 million gal/day (= Berkeley Pit full water every 2 weeks) – CSP2 bond estimate of ~ $1.2 billion

"The Panel firmly rejects any notion that business as usual can continue."

(Mt Polley Expert Panel)

QUESTIONS?