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 <u>risk-based approach</u>:
 - 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:

• <u>safety versus cost</u> 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:
 - "<u>Elements for consideration should be selected as appropriate</u> 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

