

# B.C. moves to strengthen mine-waste storage after Mount Polley dam disaster



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Published on: July 20, 2016 | Last Updated: July 20, 2016 6:11 PM PDT



The tailings pond dike breach near the town at the Polley Mountain mine site in B.C. is pictured Tuesday August, 5, 2014.

JONATHAN HAYWARD / THE CANADIAN PRESS

The B.C. government introduced regulatory changes Wednesday designed to strengthen the safety of mine-

waste storage facilities and their earth-and-rock dams, a response to the catastrophic failure of Imperial Metals' Mount Polley mine dam two years ago.

The changes address 20 of 26 recommendations from a government-appointed engineering panel and the office of chief inspector of mines, according to the provincial government.

The changes set factors of safety and limits to the steepness of dam slopes, issues addressed by both investigations.

Other changes require that all mines must put in place an independent review panel of engineers, who must be approved by the chief inspector of mines.

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New mines must also provide an alternate assessment of best available technology in their provincial applications, meant to address a recommendation from the government-appointed engineering panel that called for a move away from storing mine waste, called tailings, under water and behind earth-and rock dams.

However, environmental groups questioned how the changes would move the province away from underwater mine-waste storage, which they have pinpointed as a critical issue.

The remaining six recommendations — including beefing up government-specialized oversight of mine dams — are expected to be addressed by early 2017.

The changes to the Health, Safety and Reclamation Code for Mines in British Columbia are the first since 2008 and follow from work done by a group of

government, industry, labour and First Nation representatives. Environmentalists were excluded from the government-appointed review committee.

“I think what we have done here and what we will do in the next few months will prevent a major accident from happening with a (tailings storage facility) here in British Columbia. I am absolutely convinced of that,” said B.C. Minister of Energy and Mines Bill Bennett.

Mining Watch Canada program coordinator Ugo Lapointe said there is a discrepancy between the new rules and recommendations from the government-appointed panel, which clearly said a key component of best available technology was removing water from mine-waste storage.

The panel had suggested the use of dry-stacking tailings as an example of an alternative storage method.

Nikki Skuce, of the environmental group Northern Confluence (part of the International Boreal Conservation Campaign), said she could not see how requiring an alternative assessment of best available technology would demand best alternatives.

And NDP mining critic Norm Macdonald said rule changes alone are not going to improve safety, stressing the B.C. Liberal government needs to get serious about enforcing rules.

“I think we still have every reason to doubt this government’s commitment to enforcement,” said Macdonald, noting that the mining industry is a large monetary donor to the governing Liberals.

Following the chief inspector of mines investigation no charges were forwarded to Crown. The B.C. Conservation Officer Service still has an investigation underway.

Bennett acknowledged more resources will be needed in the ministry of mines to increase oversight.

Mining Association of B.C. president Karina Brino said while the new regulations come with a cost, companies acknowledge the changes are needed to ensure safety.

The code changes also require companies to set measurable objectives for items such as the height of water below the dam’s top, the number of dam-movement instruments that must be installed and the width of beaches (made of finely ground rock from the milling process) to provide a safety buffer between water and the dam.

Mines must now also have a tailings management system that requires regular audits.

Engineers of record and mine managers are also required to report problems to

regulators.

The Association of Professional Engineers and Geoscientists of B.C. has also developed guidelines for tailing storage facilities.

A Vancouver Sun investigation last year found specialized mining dam inspections had been cut after the B.C. Liberals came to power in 2001 and that no fines had been levied in court under the Mines Act since 1989. The Mount Polley gold and copper mine dam failed on Aug. 4, 2014, spilling millions of tonnes of water and finely ground rock containing potentially toxic metals into the environment, including Quesnel Lake.

The engineering panel concluded the dam failed because of a design flaw that failed to recognize a weak glacial soil layer beneath the dam. But the panel said that had the dam slope been flatter, as originally designed, it would not have failed. The panel also raised concerns about the lack of proper beaches.

A separate investigation by the office of B.C.'s chief inspector of mines came to a similar conclusion.

The mining industry in B.C. and Canada was shaken by the Mount Polley dam failure in the Interior, one of the largest failures in the past 50 years. It sparked concerns among the public, environmental groups and First Nations that aquatic life would be harmed, particularly salmon that use the Quesnel Lake system to spawn.

Studies on the effect of the spill are expected to continue for years.

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