



# More EA scrutiny in wake of Mt Polley

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Regulatory fallout from the August 2014 Mount Polley tailings dam breach continues. In the most recent development, the British Columbia Environmental Assessment Office (EAO) has indicated all future environmental assessment applications for BC mines will require enhanced analysis of alternative technologies and practices for tailings management.

While this may not require a full assessment of options not selected by the proponent, the promoter will have to provide more information about alternatives. In particular, where a project developer applies for approval of a wet-tailings facility incorporating a dam (as Mount Polley had), the proponent will have to provide some assessment of dry-stack, underground storage or other tailings management alternatives that do not involve a dam.

The proponent will also have to provide an assessment of the risks of a breach of the preferred tailings facility.

## **BREACH AND AFTERMATH**

On August 4, 2014, a tailings storage facility (TSF) at Mount Polley mine breached and released millions of cubic metres of tailings pond wastewater and fine sand into various waterways in central BC. In response to the breach the Ministry of Energy and Mines established the Independent Expert Engineering Investigation and Review Panel.

The panel's mandate included both investigating the cause of the breach and recommending actions for preventing other tailings dam failures in the future. The panel's final report, released on January 30 this year, summarised results of its investigation and made seven recommendations to improve the safety of both existing and proposed TSFs at mines in the province.

These recommendations included the adoption of best available technology for tailings management, as well as the establishment of independent tailings review boards and the development of improved tailings-dam guidelines and criteria.

The report also recommended that a bankable feasibility study and its related permit applications be required to consider all technical, environmental, social and economic aspects of the project.

The BC government accepted all of the report's recommendations and has indicated that it will implement these recommendations over the next year. The recommendations will be implemented through policy development, a review of the Health, Safety and Reclamation Code for Mines in BC, and a regulatory review of mining projects at both the EA stage and Mines Act permitting stage. The recommendations may also be taken up by other agencies, such as the Canadian Dam Association, various mining industry associations and the BC Association of Professional Engineers and Geoscientists.

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## CHANGES

On March 19, the EAO announced that, as a result of the regulatory review of mining projects at the EA stage, additional information requirements have been established for mines undergoing EAs in BC. These new information requirements will immediately apply to mines at all stages of the EA process. For proposed mining projects with new TSFs, for example, the following information must now be provided:

- A description and assessment of alternative means of undertaking the proposed project with respect to options for tailings management that consider technology, siting and water-balance management.
- A description and comparison of best practices and best available technologies for tailings management.
- Options for managing water balance to enhance safety and reduce the risk of a tailings dam failure.
- A comparison of technically and economically viable engineering solutions to address site conditions.
- A transparent evaluation of the factors that supported the selection of the most-suitable option. Factors that must be taken into consideration in this evaluation include safety, technical and financial aspects, as well as implications for environmental, health, social, heritage and economic values.

In practice this means mines in the pre-application stage of an environmental assessment, for example, will have these new information requirements incorporated into their application information requirements. A proponent will then be required to provide this information as part of its application submitted under section 16 of the Environmental Assessment Act. The EAO will evaluate the

sufficiency of the information provided by the proponent as part of its initial screening of the application. If the Application is accepted for review, the information will be considered in the assessment of the potential adverse effects of the project.

The EAO said the new information requirements would ensure proponents had considered all options for tailings management to reduce the potential for adverse effects on the environmental, health, social, heritage and economic aspects of the project over both the short and long term, and potential risks and implications of the designs selected for the mine and TSF, respectively, and had drafted a technically and economically feasible plan to address these risks and implications.

It would also ensure they were prepared for upcoming amendments to various regulations and policies that would further implement the panel's recommendations.

From the EAO's perspective, the new information requirements will also enable the EAO to better evaluate the tailings-management options submitted by proponents, including proponents' efforts to mitigate the risks and potential impacts of the selected tailings management option.

The BC government has been encouraging development of new mines in the province, using various measures. The Mount Polley incident, however, made clear the significant potential consequences of a tailings dam breach.

Accordingly, through the panel report and various other ongoing investigations, the government is in the process of developing and implementing increased regulatory requirements, including the EA obligations set out above. Mine proponents, lenders and consultants will need to stay abreast of likely further developments in the regulatory regime affecting this industry.