Breach at British Columbia Mine's Tailing Pond Causes Massive Release of Wastewater



The Mount Polley Mine, operated by Imperial Metals, is an open-pit copper and gold mine near Likely, British Columbia. It has a 4 km wide tailings pond built with an earthen dam that contains water and sand contaminated by various hazardous substances, including arsenic, lead and mercury.

On Aug. 4, 2014, the dam failed, releasing millions and maybe even billions of cubic litres of wastewater, contaminated sand and debris into nearby lakes, creeks and rivers, including Polley Lake, Hazeltine Creek and Quesnel Lake. No one was injured. But the force of the release was so strong that it uprooted trees in its path.

As a result, a drinking water and water use ban is now in effect for various communities in the area. And operations at the mine have been suspended.

Chief Anne Louie of the Williams Lake Indian band has properly described this incident as a "massive environmental disaster."

How did it happen'

So far it's unclear what exactly caused the dam to fail. But according to CBC News, the tailings pond has been a source of concern for years.

The CBC News report says the BC Ministry of Environment had warned Imperial Metals about the Mount Polley mine tailings pond levels repeatedly. Here's a timeline of key events:

- 2009: The mine applied for an amendment to its permit to allow it to discharge more wastewater to maintain a safe height in the tailings pond. An environmental consultant conducted an investigation as to the amendment and found that pond levels were too high and the mine didn't have a contingency plan in the event the pond failed.
- 2012: The mine's permit amendment was granted.
- Aug. 2012: The MOE found that the mine failed to report the excessive height of wastewater in the perimeter pond, which overflowed.
- April 2014: The MOE found the mine experienced high flows due to spring freshet, which blocked the pump system and resulted in an overflow of wastewater. It issued an advisory to the mine for bypassing authorized treatment works.
- May 2014: The ministry warned Imperial Metals again after the height of wastewater in the tailings pond exceeded authorized levels.
- Summer 2014: The mine applied for another amendment to its permit to let it discharge 3 million cubic metres of treated wastewater into Polley Lake. That application is still pending.
- Aug. 4, 2014: Tailings pond dam failed.

Brian Kynoch, president of Imperial Metals, says the company accepts full responsibility for the breach. A review of comments posted online to various articles on the incident suggests that people want not only the company held responsible but also Kynoch personally and the BC MOE, which some believe didn't do enough to prevent it.