

Forensic History: Ending Pollution at Canada's Britannia Mine

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The abandoned Britannia copper mine near Vancouver, British Columbia was until 2006, Canada's largest point source of metal pollution. Open mine workings in mountainous terrain and high precipitation caused adit flows to approach 1000 litres per second. High concentrations of copper and zinc sterilized marine receiving waters. This contamination continued for decades after the American-owned mine stopped production in 1974. Ending the pollution required an exhaustive compilation of the mine's management and ownership history. This history enabled government to assign "joint and several, strict, and retrospective liability" for cleanup costs to both present *and past* mine owners. The restored Britannia site now hosts the BC Mining Museum, and the adjacent receiving waters have been restored to productivity.

Canada's provinces have responsibility for their natural resources while federal laws prohibit pollution of fish habitat. A federal prosecution was ruled out given how long the pollution had been occurring and the 1998 mine owner's insolvency. Instead, the province took regulatory action based on powers it obtained in 1997. Its *Contaminated Sites Regulations* applied the "polluter pays" policy to contamination resulting from previously permitted mining practices. Finding past owners liable raises issues of fairness, but subsequent Canadian court decisions have upheld a legislature's right to assign retrospective liability.

The province and all past mine owners reached an agreement in April 2001. The province discharged former owners' liability by receiving a payment of CDN \$30 million, and later, returning mine lands to Crown ownership. The total cleanup cost including the net present value of perpetual water treatment exceeds \$75 M. The BC Cabinet decision to accept the lesser amount and avoid possible litigation remains questionable. Despite this, the Britannia example may inform other countries' efforts to end pollution from long-abandoned or legacy mines through tracing ownership history, assigning retrospective liability, and participating in structured negotiations to fund remediation.