

# Halfmile Mine Development Project

## Context

The Halfmile mine, owned by Trevali Mining, is a volcanogenic massive sulphide deposit that has been explored since the 1960s. The project is located 70 km northwest of the City of Miramichi, 60 km southwest of Bathurst, New Brunswick, and about 20 km west of the closed Heath Steele mine.

The mine is located in a highly sensitive environment straddling two major watersheds, including a renowned salmon watershed located in the Northwest Miramichi River. The company’s approach to the project’s development was to minimize surface impact with a small underground operation that involved input from First Nations, stakeholders, and government. The plans included no ore processing on site, no permanent storage of waste rock on the surface, and limited surface storage of ore, directing all runoff to the less sensitive watershed. All site discharge is controlled, and there is a commitment to meet strict Canadian Council of Ministers of the Environment (CCME) guidelines using state-of-the-art Veolia water treatment. All waste rock undergoes rigorous and systematic sampling and sorting for management and ultimate replacement underground as fill. Ore is trucked off-site for milling.

Construction began in 2011 after receiving all approvals, and mining and trucking of ore began in January 2012. As a condition of approval, the company funded a government inspector whose primary function was to monitor and advise operations; this greatly enhanced communication with regulatory agencies. Ore was trucked to the Brunswick mine concentrator (Xstrata) for several months, but ore production was put on hold in August 2012 as Trevali Mining considered other milling options. The limited-term mining project was deemed a relative success, and the company continued to prepare underground development for future production.

Pre-exploration	Exploration	Development	Operation	Closure	Post-closure
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**Lead:** Industry (N.B.)

**Steps of the Mineral Development Sequence:**  
Development, operation

**Key Finding:** Resource companies that engage First Nations communities in a timely manner and that arrive at an agreement prior to the government permitting review avoid possible delays in the process.



## Description of Measures Implemented

Project approval in January 2012 was preceded by active consultation with First Nation Mi’kmaq communities resulting in a memorandum of understanding (MOU) with nine bands to include employment opportunities with a target of at least 20 percent of the work force (including any contracting), financial benefits, hiring of a Mi’kmaq Benefits Administrator to identify and promote First Nations opportunities, a student summer employment program, and educational scholarships. The company also worked with government and a community college to develop the First Nations Core Mining Training Program, whose graduates were then hired by Trevali. The company opened an office in Miramichi and is active in positive engagement with government regulators, politicians, community organizations, and charities.

## Results

The development approach for this small underground mine project, even though in a highly sensitive location, was successful because it achieved an excellent working relationship with the First Nations, government, and the local community. The project's clean and safe approach to operations to date is a good model for future mining operations.

## Lessons Learned

Resource companies that engage First Nations communities in a timely manner and that arrive at an agreement prior to the government permitting review avoid possible delays in the process. In a jurisdiction where First Nations are asserting mineral development rights and the roadmap to consultation and agreement is not necessarily clear or is untested, it is important that companies be timely and proactive in their goal to achieve buy-in and mutual respect.

The conscientious and proactive approach to environmental management, underpinned by harmonious collaboration with the government inspector, has helped establish trust between the company, government regulators, and regional NGOs.

### For more information:

**John Griggs, P. Eng., MBA**

Manager, Resources Exploration and Development

New Brunswick Energy and Mines ([gnb.ca/content/gnb/en/departments/energy.html](http://gnb.ca/content/gnb/en/departments/energy.html))

[John.Griggs@gnb.ca](mailto:John.Griggs@gnb.ca)