## **CASE STUDY: Water Treatment - pH Adjustments and TSS Reduction.** Long Harbour - Brazilian Mining Company with Nickel Operations in Canada

## Newfoundland and Labrador

## **BACKGROUND:**

**SCG Remediation Services** was retained by a large engineering firm to supply all necessary plant, labour, materials, and equipment to manage water encountered at the mining site, including drawdown of the area between RSA Dam 1 and its cofferdam, plus maintenance of the draw down condition for the duration of the work.

Water sources included:

- Precipitation runoff,
- Surface water,
- Groundwater,
- Seepage from the RSA pond,
- Seepage from the runoff diversion pond

The water treatment was needed to adjust the pH of water collected and pumped in maintaining the drawdown of area between the RSA Dam1 and the cofferdam.

SCG

A Subsidiary

Dewatering of excavations were required to facilitate connection of the new liner system.

The system was capable of reducing total suspended solids (TSS) as well.

Project's lenght:

- 2022 Field season (6 months)
- 2023 Field season (5 months)

## SUBMITTALS:

Prior to start the project SCG submitted:

- 1. A detailed water management plan describing proposed pumping equipment, techniques, methodologies, sequencing, and safety measures, including a plan for treatment of the seepage collected to control pH before pumping to the RSA pond.
- 2. The plan described also a treatment system that demonstrated achievable End User pH target for the seepage rates expected.
- 3. End User provided with all necesary information requested by SCG to deliver a succesful outcome.



**Industry:** 

MINING