



VERTEX
Environmental Inc.

CASE STUDY
Heavy Metals

Direct Push Injection Yields Rapid Results



Background

As part of a real estate transaction, a Vertex client was committed to restoring a heavy metal plume to below applicable standards. The heavy metals of concern included Copper, Cobalt and Nickel.

Solution

Because of their strong theoretical background and extensive experience, Vertex was selected to design and optimize a multi-faceted and cost-effective in-situ remediation effort that would show results quickly. A sulphate reduction program was deemed the best choice. The Vertex team proceeded to:

- Acquire all relevant permits
- Administer three injections under moderate pressure Injections were completed using:
 - Direct push
 - Packer and gas delivery system
 - Direct placement

Multiple compounds were delivered to impacted areas, including over 600kg of EHC-M and reactive gas.

Benefit

Sulphate reducing conditions were noted within five days of the injections. Post-injection remedial objectives were met for the restoration of Copper (10 days), Cobalt (55 days) and Nickel (139 days). No on-going operation or maintenance expenses were required.

A Record of Site Condition was obtained, enabling commercial land development to proceed.

For more information contact: 519.653.8444 www.vertexenvironmental.ca