



WATERLOO BARRIER®

Cutoff Wall, Collection Trench

MGP Site New Hampshire

Case History, No. 25

Date: January, 2000

Purpose

To construct an impermeable barrier with a collection system at a decommissioned MGP site in the lake district of New Hampshire. The remediation system was designed to prevent future migration of coal tar contaminants into the water. The construction challenges included using a temporary sheet pile wall in conjunction with the Waterloo Barrier®. The soil between the two sets of piling was excavated and filled with a porous media to improve the flow of the contaminated plume. Collection wells were installed in this trench. The project was complicated by the necessity to phase the work to comply with a closure schedule of an active rail line.

Western Portion of Installed Wall



Special Features

- The Waterloo Barrier® provides a low permeability cutoff wall and shoring.
- Part of the system was installed beneath a railway line in phases.
- Collection wells were installed adjacent to the wall to collect coal tar contaminants.
- Wildlife ramps attached to the wall permit waterfowl natural access to the shoreline.
- Minimal generation of contaminated waste such as soil and water.
- Required minimal construction working area.
- Allows an excellent quality control/quality assurance program to be implemented.

Excavating Trench at the Rail Line



SITE SUMMARY

Barrier: 17,680 square feet of Waterloo Barrier® WEZ95
Depth: 40 feet Piling
Sealant: WBS 301 cementitious grout

Start: October, 1999
Finish: January, 2000
Consultant: Haley & Aldrich,
Location: Laconia, New Hampshire

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