



OVERVIEW

Vertex was retained to remediate a former gas station now developed as a commercial mall. Excavation was not an option due to the depth of the free phase and plume as well as the utilities and infrastructure on site. Groundwater concentrations of PHCs included:

- BTEX (maximum concentration of > 206,700 µg/L)
- F1 & F2 (maximum concentration of > 220,000 µg/L)
- F3 & F4 (maximum concentration of > 5,000 µg/L)

SCOPE OF WORK

- Acquired all relevant permits to complete the remediation program
- Designed and optimized an ex- and in-situ program to maximize treatment efficiencies
- Implemented a program that minimized capital expenditures and infrastructure
- Coordinate and complete a risk assessment for the site and obtain RSC



THE VERTEX APPROACH

- Chemical oxidation and enhanced aerobic biodegradation
- Product extraction and four ISCO applications
- Minimise vapour generation and migration
- Maintain low public profile
- Injection of chemical oxidant
 - 1,100 kg of RegenOx
- Injections completed using:
 - Vertical injection wells

OUTCOME

- Remediation completed on time and on budget
- Worked with consultant to develop and implement a comprehensive remedial plan
- Operations not interrupted
- Remediation objectives met for:
 - BTEX
 - F1 & F2
 - F3 & F4
- Free phase treated in-situ

