

Remediation of a Former Manufactured Gas Plant and Gas Storage Site



TYPE OF CLIENT:
Utility Company

COST (\$CAN):

- < 500 K
- 0.5 – 1 M
- 1 – 5 M
- 5 – 10 M
- > 10 M

BACKGROUND

Biogénie was selected to design and implement a remedial solution for this former manufactured gas plant and gas storage site. Due to the nature of the new redevelopment project, a great portion of the project had to be performed in a very short time frame (12 weeks). In order to respect the deadline, a dig and haul solution was selected.

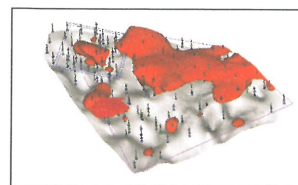
SOLUTION

Utilizing the investigation data to perform a 3D visualization of the contaminated site, Biogénie gained a comprehensive understanding of the site and as a result, proposed a turnkey and totally guaranteed (fixed-price) remedial solution. This solution provided our client with substantial cost savings as the estimated volume of source material was significantly reduced.

Key elements of the remediation strategy were: (1) Dewatering of the site to expedite excavation activities; (2) On-site segregation of the clean soil and debris from the source material; and (3) Backfill management, including reuse of the crushed concrete that provided additional cost-savings for the reconstruction project. Overall, 236,000 tons of material were managed, 69,000 tons of contaminated soil and tar residue were landfilled and 6,100 m³ of concrete foundations were demolished.

SERVICES

- 3D visualization of the contaminated site;
- Supplemental site investigation;
- Design of a Remedial Action Plan, including a Health and Safety Program;
- Construction and operation of a dewatering system to lower the water table as required to expedite excavation activities;
- Management of 53 M liters of water prior to its discharge into the public sewer system;
- Excavation and landfill of 69,000 tons of source material consisting of soil contaminated with fuel oil and tar residue; some of the excavation was carried out beneath an interstate highway bridge, as well as an active natural gas medium pressure pipeline;
- Segregation and disposal of debris;
- Backfill management as a function of the intended site redevelopment project;
- Preparation of the Remedial Action Completion Report.



This project clearly illustrates the strengths of Biogénie's 3D visualization tool, while demonstrating outstanding contracting and project management capabilities that provided multi-million dollar cost savings to our client.