



Remediation of a Railway Yard



TYPE OF CLIENT:

Railway Company

COST (\$CAN):

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

BACKGROUND

In order to modernize and expand the company's premises, it was necessary to restore a sludge disposal lagoon, as well as an adjacent site where soil was impacted with hydrocarbons. The lagoon waste was classified as hazardous, as such, disposal was extremely costly. As a result, Biogénie was called upon by the client to develop a cost-efficient alternative.

SOLUTION

Having completed a laboratory treatability study and small-scale pilot study, Biogénie was in a position to offer a customized and cost-effective solution for the remediation of hazardous sludge. An *ex situ* Biopile process, coupled with a biofilter for treating gas effluents, was used to treat the sludge and contaminated soil simultaneously. Biogénie successfully reduced the level of contamination from a hazardous waste to a domestic solid waste classification, resulting in significant savings in landfill disposal costs.

SERVICES

- Characterization study and 3-dimensional visualization of the site to determine the extent and degree of underground contamination;
- Treatability study to develop an appropriate biological treatment, notably for sludge;
- Design and assembly of treatment equipment;
- Removal of 11 underground storage tanks followed by the excavation of sludge and contaminated soil;
- Biotreatment of approximately 2,000 tons of hazardous waste sludge and 14,000 tons of soil containing petroleum hydrocarbons, monocyclic aromatic hydrocarbons and phenols;
- Final disposal in a sanitary landfill site.