

# GTR | Case Study: Mississauga



In Situ Thermal Desorption in conjunction with soil vapor extraction was used to remove volatile organic compounds which contaminated the groundwater and saturated soil areas of a former metal fabricating facility in Ontario, Canada. The site had VOCs detected above the Canadian water standard in various monitoring well locations.

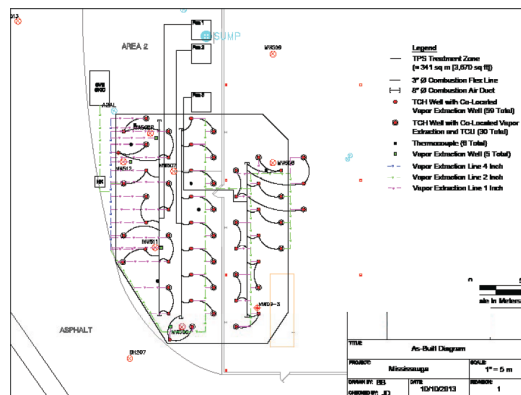
## Project Description

50 wells were installed on site, both inside and outside the facility, to a max depth of 5 meters. 30 GTR heaters and 12 SVE wells connected to the heating wells. The target temperature needed to successfully achieve remediation goals was 100 °C.

## Remediation Results

The remediation goal was achieved in 84 days and saw a 98% reduction in groundwater contaminants. 99,719 kWh of electricity and 144,482m<sup>3</sup> of gas were used to run the system for the duration of the project.

This project proves that ISTD is uniquely positioned to be the most suitable thermal option for chlorinated sites, offering low cost options, scalable operations, the ability to operate in both the vadose zone soil and groundwater applications and effectively treat shallow areas.



## In Situ+NAPL Extraction

Neighborhood: Industrial

Heating Tubes: 50

Volume: 1,700 m<sup>3</sup>

Target Temp: 100 °C

Heating Period: 84 Days

Target Remediation Goal:  
Elimination of DNAPL

Destruction Rate Efficiency: 98%

Contaminant:  
TCA, TCE, DCA, and DCE

Geology: Silty Clay, Silt