

BACKGROUND

Barenco was retained to conduct assessment and remediation work at a 12-acre vacant property located in Brantford, Ontario. Industrial establishments had been located on the property and on adjacent properties since 1900 or earlier.

For many years, the property was the site of a foundry. Several underground storage tanks and rail spurs had been located on the property. The foundry was decommissioned and demolished in 1994. At that time, almost 22,000 tonnes of impacted soil was removed.

THE REMEDIATION

Supplemental investigation revealed the presence of some petroleum hydrocarbons in an area where the machine shop had been located, consistent with the location of several underground storage tanks. Barenco was retained to conduct an environmental remediation of soil impacted by petroleum hydrocarbons. Soil from the impacted zone was excavated to a minimum depth of 5 metres and stockpiled for sampling, analysis and disposal, as indicated. Since the excavation extended below the water table, **ground water management** to control water levels in the excavated area was necessary.



The excavation was executed in cells and water was pumped from one cell to another in order to lower water levels as required.

THE RESULT

In total, 500,000 litres of water were treated prior to discharge in accordance with the City's sewer bylaw and about 54,000 litres of free-liquid petroleum was removed by vacuum trucks. Remediation of petroleum impacted soil was successfully completed at the property. Approximately 6,400 tonnes of soil was removed and disposed at a licensed landfill.