

BACKGROUND



Barenco was retained by a developer to undertake remediation of a parcel of land which had previously been used as a leather tannery. In addition, a portion of the property had contained a railway and sidings. A bulk fuel storage depot had existed adjacent to one of the rail sidings.

The eastern portion of the property was to be developed for use as residential condominiums. There were two main types of contaminants. The first was soil impacted with petroleum (TPH) and the second was soil containing boron, EC, SAR and with elevated pH. Petroleum impacted soil was stockpiled in preparation for construction of biopiles on site.

THE REMEDIATION

Approximately 5,000 tonnes of soil was processed using Barenco's MOE-licensed proprietary **bioremediation system**. Bioremediation was selected as a preferred method to landfilling due to significant cost saving. Bioremediation took about one year to complete during which time monitoring and sampling of the biopiles took place routinely to verify that the process was achieving the appropriate criteria for TPH. In areas where bioremediation would not have been effective, the impacted soil was excavated and disposed at a licensed landfill.

To remediate the soil containing boron, EC, SAR and with elevated pH, track mounted equipment was used to mix the impacted soil with surrounding clean soil to achieve compliance with the criteria. Mixing on-site is an MOE approved method for these specific chemical parameters which are related to plant toxicity and not to human health.

THE RESULT

Luxury condominiums were constructed on this lakeside site following completion of Barenco's work.