



### Project Data

**Region:** Tottenham, North London

**Client:** Secondsite Property Holdings Ltd

**Involved Units:** Eneotech Environmental Ltd

**Execution Time:** 2004 - 2006

**Contract Value:** £850,000

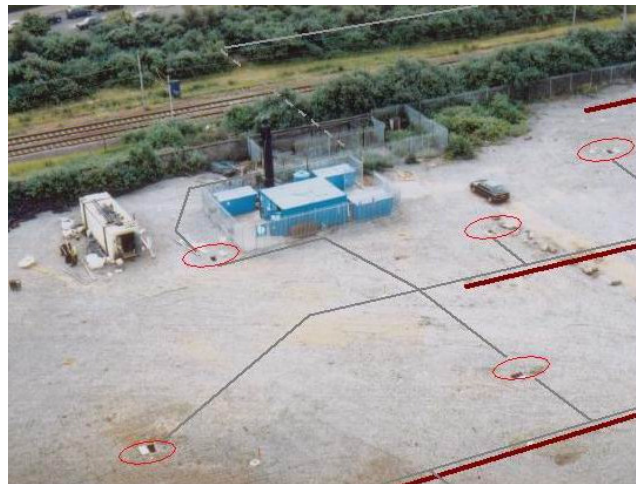
### Work Performed

Design and permitting

Installation of 50no. large diameter (200mm) remediation well points

Installation and Operation & Maintenance of 200m<sup>3</sup>/day LNAPL/ DNAPL separation plant

Recirculation of treated waters



# Groundwater Treatment & Free Product Recovery - Tottenham Gasworks, Phase 1

Groundwater Remediation Services

Contaminated Soils and Groundwater

## Groundwater Treatment and Free Product Recovery - Tottenham Gasworks Phase 1 , London. UK

Eneotech Environmental Limited were employed by SecondSite Property to conduct a groundwater remediation programme at a former gasworks site in North London.

The remediation objective was to remove a substantial quantity of free phase oils from the groundwater. To achieve this, a sophisticated "pump and treat" process was chosen. This featured an automated remote computer control system and innovative processes to remove a complex suite of contaminants. Fifty pumping wells and ten monitoring wells were installed, along with 200m of deep infiltration galleries for recirculation of treated water back into the ground. Over 5 km of buried MDPE distribution pipework was needed.

The remediation process starts with water and oil being recovered from the pumping wells via toploading pneumatic total fluids pumps. The pumping induces local downward groundwater gradients into the wells to give an active collection and recovery of free phase oil. The water/oil mix is pumped into a state-of-the-art treatment plant with a capacity to treat 500m<sup>3</sup> / day of contaminated water. The oil-water separation facility removes all free oil phases, and delivers water for secondary filtering and VOC removal by air stripping, prior to discharge to sewer.

The treatment plant was configured to recover DNAPL and LNAPL oil phases via a single pipe distribution system. This is an advanced process and offers an unparalleled flexibility to cope with multiple density phases of groundwater oil contamination. All plant systems are microprocessor controlled and can be operated in both automatic or manual modes as necessary. A telephone link enables remote switching of pumps and regular performance monitoring via digital data downloads. Pressure transducers in wells across the site continuously monitor groundwater levels to enable ongoing system optimisation. Automatic effluent water sampling facilities enable regular sampling to ensure compliance with water discharge consent criteria. A secure compound and vandal-proof containers maximise

security.

The remediation system is subject to local environmental air quality and noise restrictions. Eneotech carry out regular environmental monitoring and submit data to the Local Authority for review. Compliance so far has been complete. Precision ground surface levelling is also undertaken to ensure that no ground subsidence occurs to adjacent properties.

Eneotech Environmental Ltd. Provides a wide range of remediation technique to enable the redevelopment of contaminated land, and are term contractors to National Grid Property Holdings Ltd with respect to specialist groundwater remediation projects. We offer a full range of technologies including soil vapour extraction, air sparging, soil washing, thermal desorption, bioremediation (windrow turning and ex situ static methods), stabilisation and solidification.

Eneotech Environmental Ltd is backed by decades of experience and interdisciplinary skills amassed by the Eneotech group of companies.

Our company Eneotech Environmental Ltd ranks as one of the most highly skilled and dependable services providers specialising in site rehabilitation, waste disposal and service platform preparation.

### Head Office

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