



SUFFOLK

- CLIENT

Independent

- PROJECT DURATION & VALUE

2 years | £200,000

- KEY SERVICES

Safety control

Regulator and third parties liaison

Waste characterisation and classification

Service avoidance

Excavation and disposal

Construction of bespoke in-situ dual phase extraction system with air sparge and soil vapour extraction capabilities

Monitoring, maintenance and optimisation servicing

- OUTCOME

The installation of the project took six weeks and the system has been in operation for over 2 years. To date, almost 10,000l of liquid phase hydrocarbon has been recovered from the subsurface. In addition, dissolved concentrations of contaminant in groundwater have reduced. Remtech continues to lead the engagement with the Environment Agency over remediation closure criteria.

DECONTAMINATION OF FORMER PETROL STATION USING DUAL PHASE AND SOIL VAPOUR EXTRACTION WITH AIR SPARGE

An intrusive site investigation found petrol in the ground beneath the site and adjacent residential properties. The site lies upon a chalk aquifer in a Zone 1 groundwater protection area. Liquid petrol was found floating on the groundwater beneath the site at a depth of 6m below ground level and remediation was required by the Local Authority and Environment Agency. The consultant proposed the use of several treatment technologies (a treatment train) including excavation work, total fluid extraction, chemical injection and a combination of Air Sparging and Soil Vapour Extraction technologies.

RemTech was responsible for carrying out works to completely decontaminate the site and surrounding affected properties. Its work included the following:

- Detailed system design to meet consultant's objectives.
- Construction of bespoke dual phase extraction system with air sparge and soil vapour extraction capabilities.
- Construction of service trenches to connect existing remediation wells with remediation equipment and subsequent reinstatement.

- Disposal of shallow soil and concrete waste.
- Recovery of total fluids for separation and disposal of liquid hydrocarbon.
- Operation, optimisation and maintenance of soil vapour and total fluid extraction.
- Operation of air sparge system with soil vapour extraction to reduce concentrations of contaminant in groundwater to acceptable levels.
- Low flow sampling and environmental monitoring.