



# Soil and groundwater remediation on a former gasworks site

Camberley, Surrey

**Client:** DTZ

**Site area:** 1.8ha

**Location:** Camberley

**Timeframe:** 12 months

**End use:** Commercial

## Challenge

McAuliffe was tasked with remediating the site of a former gasworks, in preparation for a new car showroom to be built.

Decades of industrial use had left behind extensive soil and groundwater contamination, in the form of PAHs and free product.

Further challenges included:

- The site sitting adjacent to a large river, raising ecological concerns
- The need for multiple complex service diversions
- The presence of multiple buildings onsite, which contained asbestos
- The site's position next to a busy road
- The site's history as a former gasworks, with historical contamination and underground structures present
- Strong odours associated with a gasworks

## Solution

### Early involvement

Our team worked with the client consultant, Stantec, from an early stage in the project, creating an effective remediation strategy that would be approved by the regulator.

This included taking chemical stabilisation analysis samples to determine a suitable remediation target, obtaining an Environmental Permit, creating a Materials Management Plan (MMP), and securing a FRAPs permit to allow us to work next to the river.

By liaising with the regulator regularly, we facilitated **discharge of planning condition.**

### Remediation strategy

Key receptors were identified as the river and end users of the site. In order to stratify the site-specific risk assessment, we treated soil contamination using a combination of bioremediation and stabilisation/modification.

Impacted groundwater posed a significant risk, so we designed and built a **bespoke Pump and Treat system** to efficiently treat contamination. We followed this with in-situ chemox, using our UK-exclusive substrate, **OBC**, which is supplied by Carus Corporation.



Before we started remediation, our team also demolished existing buildings onsite, stripping out asbestos fibres and removing all below-ground foundations and potential obstructions to future development.

Sustainability was paramount. To ensure maximum re-use of materials onsite, we produced a detailed MMP in line with the DoW CoP, which was approved by CL:AIRE.

As materials volumes were large, we also used our in-house **Environmental Permit (MTL)**.

Strict health and safety procedures were in place throughout this project, and dust cannons with odour suppressant were used to minimise impact on surrounding areas.

### Managing complex service diversions

During works, our team oversaw complex service diversions, while ensuring site works continued on-programme.

This included managing the diversion of a 600m gas pipe, HV cable, and rising main foul sewer, as well as designing and installing temporary works for deep excavations.

By communicating closely with subcontractors and utility suppliers, we were able to carefully programme works for minimal disruption.

## RESULTS

- Achieved contamination reduction targets efficiently
- Facilitated discharge of planning conditions
- Secured regulatory approvals, allowing the project to go ahead
- Reacted to a change in the foundation solution during works, providing a dual solution for geotechnical and contamination compliance
- Zero incidents