

Preparing a historic gasworks for development

Tonbridge, Kent



Client: Chancerygate

Site area: 2.7ha

Location: Vale Road, Tonbridge

Value: >£1m

End use: Commercial

Challenge

Remediation and earthworks to prepare this heavily TPH-contaminated site for the construction of mixed commercial units.

Over the past century, the site had housed a gasworks, tar distillery, and bitumen refinery, leaving behind a highly complex set of contamination. The site had been derelict for almost 20 years before works began.

Specific challenges included:

- Extensive hydrocarbon-impacted soils
- A 3,500m² Benzene/TPH-impacted groundwater plume
- The site being within 100m of a water course and railway line
- Significant underground concrete obstructions

Migration of contamination into the water course was the primary driver of remediation.

Solution

Our team turned over the entire site, removing large obstructions down to 2.5mbgl, then reengineering the ground to the agreed earthworks specification.

All materials movements were carried out under a detailed **Materials Management Plan (MMP)**, and tracked in **real-time** using our in-house 3D GPS-enabled plant.

Before works began, we discharged our own **Environmental Permit**, having obtained discharge consent.

Our remediation team treated contaminated soil by bioremediation or **Stabilisation/Modification (S/M)**, using cement and granulated blast furnace slag as binder – which has **zero carbon footprint**.

We installed sumps onsite, then treated Benzene-impacted groundwater using a **pump and treat** system. This was followed by a programme of **In-Situ Chemical Oxidation (ISCO)**, which saw us inject our UK-exclusive substrate, **OBC**, into 120 points across the site.

We used our in-house **mixing trailer** to boost efficiency during the injection process, ensuring accurate control of pressures, flow rates and volumes for each point injected.



Dust suppression, VOC monitoring and noise monitoring were conducted throughout the works.

The project was overseen by our dedicated health and safety team, ensuring high safety standards, and that no incidents were recorded.

RESULTS

- Soil and groundwater remediation targets achieved
- Works completed on time and on budget
- Over 2T of asbestos picked from soils
- 5,500m³ material processed into reusable 6F2