

Grafton Works, Bedford

Our Services

- Contaminated Land Investigation
- Source Pathway/Receptor Relationship
- Risk Assessment
- Remediation Strategy and Design
- Negotiation with Regulators
- Groundwater Monitoring, Validation and Certification



Contamination Remediation by Air Sparging and Vacuum Extraction

A former engineering works in Bedford was to be developed for residential housing. Old oil storage and fuel tanks on the site had leaked over the years leaving a plume of hydrocarbon and volatile organic compound contamination within a gravel aquifer across a significant proportion of the site.

After extensive investigations to delineate the extent of the plume, **CGL** negotiated with the regulators to use a method that allowed the remediation to be undertaken in-situ and avoid the costs, disruption and environmental impact of bulk excavation and dewatering. The solution developed comprised the use of air sparging enhanced by the addition of ozone to break down the hydrocarbon contamination. Groundwater levels were lowered by local pumping to assist in the remediation process.

CGL was appointed to oversee and validate the remediation, undertaken by Knight Environmental. This involved directing the works, assimilating monitoring data and liaising with regulators, developer and contractor.

Validation undertaken during the remediation demonstrated that the diesel plume was reducing in size. After phased sign off, the developer was able progressively to construct over the remediated area.

Client: Rialto Homes