

## Lady Margaret Hall, Oxford

### Our Services

- Supplementary Phase II Investigation
- Source pathway/Receptor Relationship
- DQRA (detailed Quantitative Risk Assessment)
- Remediation Strategy
- Validation



### Prevention of Off-Site Migration of Contaminated Groundwater

**CGL** was appointed to determine the extent of the hydrocarbon contamination within the soil and groundwater encountered in previous investigations and to provide appropriate remediation options.

The site is currently part of the Oxford University's halls of residence. However a part of the site was formerly used as a garage.

Site investigations by **CGL** confirmed hydrocarbon contamination within the River Terrace Gravels and the groundwater beneath the site.

The River Cherwell is located less than 300m downstream from the contamination plume and a DQRA was conducted determine the remedial target required to protect the river from contamination.

**CGL** also provided various options to remediate the groundwater and, due to the small size of the site, chemical oxidation was selected as the preferred option.

The remediation involved injecting hydrogen peroxide (with a ferrous sulphate catalyst), by gravity, into approximately 40 injection wells within the plume area. Two rounds of injections and monitoring were conducted over a seven week period. Subsequent monitoring after the two rounds of chemical injection indicated the hydrocarbon concentrations had successfully reduced to below the required remedial target.

This form of remediation was shown to be quick and affective in reducing hydrocarbon contamination within the groundwater.

Client: Lady Margaret Hall Trading