

SUSTAINABLE REDEVELOPMENT OF FORMER INDUSTRIAL UNIT, WATFORD
CONTRACT VALUE: £150K
BRIEF: DISCHARGE OF PLANNING CONDITIONS

WD Environmental was appointed by the developer to manage the contamination issues associated with the redevelopment of a former industrial site in Watford, Hertfordshire. The site lies on a principle bedrock aquifer (chalk) and was proposed for residential redevelopment. Previous investigations had identified there to be heavy metal impact over the majority of the site and a plume of hydrocarbon impact associated with a former bulk fuel storage area.

The scope of work completed by WD Environmental included the following items:

- Targeted Site Assessment
- Detailed Quantitative Risk Assessment
- Remedial Options Appraisal
- Site Waste Management Plans
- Material Management Plan
- Verification of Remedial Works
- Regulatory negotiations to gain closure of project



Initially a targeted investigation was conducted that identified that the groundwater was non impacted, the heavy metal impact was restricted to upper 0.3m over only a third of the site and that the shallow soil hydrocarbon impact was limited to $\sim 500\text{m}^3$.

WD Environmental was able to influence adoption of a “zero waste” strategy at the design stage of the project, such that waste materials would either be reduced, reused, recycled or recovered. Sustainable remedial techniques were selected comprising use of cover systems, vapour barriers in dwellings and for on site bioremediation of the hydrocarbon plume. Materials were retained on site where possible for reuse via the adoption of the CL:AIRE Code of Practice on the Definition of Waste. Other materials were taken off site for recycling/recovery, all of which were managed within the Site Waste Management Plan. Adoption of sustainable practices is thought to have saved the client $\sim \text{£}250,000$ over the duration of the demolition and groundworks phases of the redevelopment.

WD Environmental made regular verification visits to site to record the material movements and provide guidance to the groundworks contractor as the works proceeded. Samples were tested to demonstrate compliance with the proposed remedial criteria for both soil and groundwater. A Remedial Verification Report will be prepared on completion of the construction works, due towards the end of 2011, to comply with the requirements of planning.