

Remediation

Soil Vapour Extraction – East Anglia

Ecologia were instructed to provide a remediation options appraisal of contamination in the rear garden of a domestic property in East Anglia. The groundwater was determined to not be at risk due to the limited vertical migration of the contamination, leaving land and structures as the receptors. Excavation and disposal were rejected on the basis of costs and Ecologia proposed the use of a Soil Vapour Extraction system. The project was organised using a fixed price contract and Ecologia were responsible for regulator liaison to achieve 'sign off' for the project and remove liability for the client.

The SVE system was designed to be compact and ran from a single 13 Amp domestic power supply. The equipment was manufactured at Ecologia's workshop in Sittingbourne and assembled on site. The full installation and commissioning of the equipment, including the drilling of the SVE wells was completed in four days. The treatment system was full soundproofed, allowing it to run 24hours per day in a domestic garden.

The starting concentration for the project was in excess of 2,500 mg/kg. this was reduced to below 200mg/kg during a treatment time of 6 months.



The project was monitored remotely using a telemetric link using data from the hydrocarbon concentration in the soil gas, which was reduced from >300ppm at the start of the project to below 10ppm. Once the soil gas hydrocarbon concentration had been reduced to below 10ppm soil samples were taken to validate the process. The remote monitoring allowed Ecologia to greatly reduce the number of site visits required thereby saving costs and increasing sustainability.

Ecologia obtained agreement from the regulators that the risks had been removed within the agreed timeframe and budget.