



Client Name

Bromsgrove and Redditch Council
Former Fire Station, Bromsgrove

Type of Works Completed

Phase II Site Investigation, Remediation Strategy,
Groundwater Monitoring and Remedial Supervision

Project Overview

Investigation of the potential presence of PFAS
compounds due to historic usage as a fire station.



Our Approach

Through investigation and subsequent testing, Brownfield Solutions identified that the soil, groundwater and concrete / brick associated with a former basement had been impacted by PFAS, primarily in the forms of PFOS and PFOA. Soil and groundwater concentrations were digitally modelled to identify potential 'hot spot' zones.

Detailed Quantitative Risk Assessment (DQRA) was completed, with monitoring, sampling and modelling undertaken in order to develop remedial target values (RTVs) for soils and groundwater. Brownfield Solutions liaised with the Environment Agency throughout, and successfully agree a set of appropriate RTVs for the site.

The Solution

In order to provide the best remedial solution for the site, Brownfield Solutions undertook an options appraisal, assessing several remedial options, including emerging technologies. Options, in addition to source removal, included utilisation of a stabilisation medium to sorb and entrap the contamination, thermal treatment to volatilise the contaminants and combustion.

Outcome

Following the options appraisal, the EA accepted the favoured option, and a Remedial Specification was completed. This has been agreed, with Brownfield Solutions engaged to complete further monitoring and remedial supervision, with verification of remedial measures.

Soil hotspots were successfully removed from site, with validation showing the on-site extents of the impaction had been reached. A period of 6-monthly groundwater monitoring was completed, and ongoing liaison regarding further remediation to target impacted groundwater is ongoing.