



HIGHBRIDGE

Consultancy & Remediation Works

PROJECT SCOPE

VertaseFLI was employed by a land developer to carry out full site assessment and subsequent remediation works to discharge relevant planning conditions to allow this large contaminated site to be re-developed for a supermarket and residential housing. These objectives were fully met and the supermarket and homes are to be constructed on a still gassing landfill. The site has a long and varied industrial past and had previously been used as a brick works with clay extraction, railway sidings, oil storage and blending facility, glass works, bus station and furniture manufacture.

VERTASE FLI ROLE

VertaseFLI carried out full geoenvironmental site investigations, which identified amongst other issues, significant heavy metal and TPH contaminated made ground up to 9.5m deep. TPH contamination of groundwater including separate phase product, and significant ground gas levels of carbon dioxide and methane. VertaseFLI then completed human health, ground gas and controlled waters risk assessments to establish source-pathway-receptors linkages and ultimately, calculate site derived clean up criteria. These were then incorporated into a detailed remediation strategy. In addition to all works being discussed and approved by the local authority and Environment Agency, all works were overseen and approved by an independent environmental consultant employed by the supermarket developer.

Comprehensive remediation works were then undertaken by VertaseFLI including excavation of heavy metal & TPH hotspots, large scale pump and treat of TPH contaminated groundwater and separate phase product, ex-situ bio-remediation of 6,000m³ of soils, and materials processing of some of the waste within the infilled pits. Installation of a hydrobarrier cut off wall to protect the site from off site contamination, installation of a geocomposite gas collection system beneath the supermarket car park, and installation of a virtual gas curtain around the infilled pits to protect off site receptors. Works were completed on programme and within the all risk lump sum submission. A geotextile was placed under the new pipe, so subsequent workers would not be exposed to ACM soils.



PROJECT OVERVIEW

CLIENT

LAND DEVELOPER ON BEHALF OF ASDA & SOCIAL HOUSING COMPANY

LOCATION

HIGHBRIDGE, SOMERSET

PROJECT VALUE

£850,000

DURATION

6 MONTHS

SERVICES PROVIDED

- Site investigation
 - Human health and controlled waters risk assessment
 - Pump and treat, bioremediation
 - Earthworks
 - Gas protection and virtual curtain
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INSTALLING THE VERTICAL GAS CURTAIN AROUND THE INFILLED PITS TO PROTECT OFF SITE RECEPTORS



INSTALLING HYDRO BARRIER CUT OFF WALL TO PROTECT SITE FROM OFF SITE CONTAMINATION



INSTALLING THE HORIZONTAL GEOCOMPOSITE COLLECTION SYSTEM BENEATH ASDA CAR PARK



GASLAYING THE GEOTEXTILE MARKER LAYER OVER THE HORIZONTAL GAS COLLECTION SYSTEM



HYDROCARBON HOTSPOT REMOVAL PUMPING WATER AND FREE PHASE PRODUCT TO ON SITE WATER TREATMENT



COMPLETED VENT STACKS AND VENT BOLLARDS IN LANDSCAPED AREAS AROUND ASDA SITE