

CASE STUDY

PUMP & TREAT RECOVERY SYSTEM FOR LNAPL TREATMENT

PROJECT:

Former Print Manufacturer, Slough

PROJECT VALUE:

£180,000

PROJECT TIMESCALES:

12 months

DATE AWARDED:

2014

CHALLENGE:



Free phase toluene was discovered at the site of a former print manufacturers upon decommissioning of underground storage tanks. Further site investigation identified a large LNAPL plume impacting shallow groundwater both onsite and offsite. ERS was instructed to develop and deliver a site remediation solution to achieve Regulatory compliance.

SCOPE OF WORKS:



ERS designed a pump and treat system utilising ERS' versatile remediation control cabin which allows the controlled use of a variety of different equipment to recover LNAPL from the site.

The complex geology encountered resulted in the use of a combination of electric impeller pumps for groundwater manipulation and pneumatic total fluids pumps for recovery of free phase NAPL and assurance of ease of surface separation.

The pumping solution was fed through oil water separation equipment, a shallowtray air stripper unit and activated carbon prior to discharge to foul sewer under consent.

This was used to reduce the NAPL thicknesses significantly prior to injection of chemical agents to remove the residual NAPL and thus achieve Regulatory compliance.

OUTCOMES:

ERS successfully implemented the multistage remediation solution, with the pump and treat system recovering over 5000 litres of Toluene. Successful implementation of chemical agents achieved final regulatory compliance, releasing the site for return to its owners.