

## Case Study



Pump & Treat System



Air Stripper System and  
Chemical Dosing & Quality  
Monitoring



Brownfield Briefing 2018

Winner

“Best Conceptual Design”

Remedial Strategy Develop-  
ment for a Complex Fractured  
Bedrock DNAPL site

## Groundwater Pump & Treat ERM UK, Chlorinated Hydrocarbons

**Client:** ERM

**Location:** Southwest UK

**Contaminants:** TCE & other sol-  
vents

### Objectives

- Protect local receptors by hy-  
draulic containment
- Achieve site permitting compli-  
ance.
- Stabilise the plume to permit  
further environmental impact  
assessment & remediation op-  
tions appraisal

### Challenges

- Maintaining hydraulic control in  
a fractured bedrock
- Unexpected ongoing releases of  
acids & alkalis to groundwater
- Unexpected e coli contamina-  
tion from a damaged sewer  
pipe

### Treatment Processes

- ◆ Submersible groundwater  
pumps
- ◆ Air Stripper
- ◆ Chemical equipment: pH  
correction, static mixer
- ◆ UV Oxidation
- ◆ Discharge pump & quality  
monitoring equipment:
  - ⇒ Flow
  - ⇒ Volume
  - ⇒ pH
  - ⇒ Turbidity
- ◆ Aqueous phase GAC
- ◆ Vapour phase GAC
- ◆ PLC based control system  
& datalogging.

