



## Groundwater Filter Barriers and Earthworks

### The Issue

The LDA had acquired this plot of land which had formerly been the location of a landfill site. Groundwater with high concentrations of ammonia was percolating through the landfill and migrating to a nearby water course.

### The Objective

The solution proposed by EDSR was to initially gain a better understanding of the site geology and hydrogeology. This information was then utilised in the design of a groundwater interception scheme which included treatment filters. The groundwater was collected and treated through these filters before being discharged into the nearby water course. In addition re-profiling the top of the landfill was undertaken to minimise rainwater infiltration into the landfill material.

#### Client

**London Development Agency (LDA)**

#### Location

**Dagenham, UK**

# The EDSR Solution

- Characterisation of the site geology, hydrogeology and geo-chemistry.
- Assessment of the most effective and economic solution to manage the problem. This resulted in the in-ground filter barrier concept.
- Submission of the outline proposal to the Environment Agency and other regulatory bodies and obtaining their approval.
- Design of the in-ground filter barrier and earthworks.
- Installation of the in-ground barrier and filter sections.
- Re-profiling the landfill surface including screening and crushing materials.
- Continued monitoring and validation of the installed system to demonstrate compliance
- Final reporting on the ongoing performance of the installed system.
- Project closure.



**For more information please contact:**

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