



## Remediation of a Former Landfill Site

### The Issue

The remediation of a former landfill area associated with a neighbouring chemical works. Two water channels crossed the site one of which comprised mine water flows containing high levels of dissolved iron (acid mine water).

### The Objective

Design and build a strategy with the aim of remediation of the inherited liabilities associated with the landfill, existing mineshaft and mine water flow. The design was to include for a sustainable solution for the treatment of the mine water and to create a marshy area of land for natural habitat.

#### Client

**Akzo Nobel**

#### Location

**Littleborough,  
Rochdale**

# The EDSR Solution

- Construction of a wetland/reed bed using a lining system comprising Geosynthetic Clay Liner and 2mm HDPE liner for the treatment of the mine water before it exits the site.
- Creation of marshy land to the east of the wetland using a system of open ditches to retain water in this area before channeling into the wetland area.
- Construction of an open ditch for collecting and channelling infiltration water to the wetland.
- Capping of the re-graded area using Geosynthetic Clay Liner topped with imported clays and topsoil.
- Reinforcement of wetland banks.
- Construction of a timber crib retaining wall for stabilisation of the steep slope created by earthworks for wetland construction.
- Construction of inlet headwall to wetland.
- Construction of outlet arrangement to wetland.
- Modification to existing railway culvert headwall.
- Construction of access track and fencing.
- Landscape planting including establishment of reed bed.



## For more information please contact:

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