

Mirfield Groundwater Remediation Environment Agency

The operation of a former pesticide factory resulted in the discharge of quantities of tarry process residues into a shallow alluvial aquifer adjacent to the River Calder at Mirfield, Yorkshire. Over the years, this material had migrated to the river and was discharging from the river bank as a highly visible LNAPL slick. The site is designated a Special Site in accordance with the Contaminated Land (England) Regulations 2000, and as such, has become the responsibility of the Environment Agency.

Remedial works were designed and successfully implemented by Entec. This involved the installation of a sheet pile cut-off wall and system to collect the oily product.

The system consisted of:

- a collector trench with slotted collector pipe, excavated to the confined product layer and backfilled with free draining material to standing water level;
- product collection manholes and product skimming pumps; and
- a pipeline leading to product storage facility at a secure site some 200m from the collection system.

A significant complication in undertaking this work was that some of the contamination discharged through the foundations of a 150-year-old bridge carrying the trans-Pennine railway lines. In addition, there were added complications such as high voltage electricity cables and the constraints

associated with working on a 'top tier' COMAH site.

Entec has been responsible for:

- specification and design of the remedial works;
- planning application and liaison with regulatory bodies and Railtrack;
- contract document preparation and procurement (jointly with the Environment Agency);
- construction control and supervision; and
- provision of operation manuals and training.

