

Project: Groundwater Control & Treatment
Client: Global Aerospace and Defence Company
Location: Cheshire
Duration: 12 weeks



Works

- Deployment of Environmental Permit EAWML30375
- Calculation of groundwater ingress rates
- Design of free product recovery system
- Design of groundwater dewatering system
- Installation of pumps and interconnecting services
- Installation and commissioning of automated control system
- Installation and operation of groundwater treatment system
- Environmental compliance monitoring, sampling and analysis

Synopsis

Two phases of remediation works were undertaken which involved the decommissioning of sub-surface process rains and swarf recovery conveyor trenches to remove contaminated sediment, water and any free phase organic liquids followed by groundwater lowering to allow deep excavations to proceed.

Several stages of groundwater treatment equipment were required to ensure the removal of suspended solids, free phase hydrocarbons and dissolved chlorinated hydrocarbons. These included, settlement, separation, air stripping and polishing by granular activated carbon. Treated effluent was discharged to foul sewer under the site’s operating discharge consent.

The treatment plant operated automatically via a contractor designed control system complete with telemetry. Approximately 2 million litres of effluent were treated during the contract with over 4,100 litres of free phase oil being recovered.

