Pilot Remediation Trial – Northeast England

Former Use: Power Station  
Client: Regional Development Agency  
Value: £300,000  
Location: Northeast England

Pro vectus undertook the design and implementation of a number of small-scale site based remedial trials to assess which remediation technique(s) could be best employed to successfully treat hydrocarbon impacted soils and water. The pilot assessment included verification of reducing contaminant concentrations to the Remedial Targets and an assessment of which technique(s) would be most cost effective and sustainable during the wider remediation works at a later date.

The techniques selected were targeted at soil, groundwater and free product recovery remediation technologies, the trials were focussed on three different areas of the site which exhibited various material types including both cohesive and granular soils.

4No Pilot Trials for hydrocarbon impacted soils:
- Forced Aerated Biopiles;  
- Enhanced Bioremediation;  
- Soil Washing;  
- Thermal Desorption.

4No Pilot Trials for hydrocarbon impacted waters
- In-situ – Hydrogen peroxide injection;  
- In-situ - Sparged Ozone;  
- NAPL Recovery;  
- Dewatering pumping trial and treatment via onsite Water Treatment Plant.

In addition to undertaking the pilot trials asbestos contamination was identified on site, an Asbestos Management Plan was prepared for the trial works, including detailed risk assessment, control measures and ambient air monitoring.

Information from the site pilot trial was used to remove the risk and uncertainty of the remediation works and enabled a sustainable and cost effective remediation strategy to be drawn up for the various elements of contamination present on site.