

# Derwenthaugh Cokeworks

## Client:

Gateshead  
Metropolitan  
Borough  
Council

## Value:

£5,400,000



## Brief

To carry out the work in two stages, the first to reclaim the site and the second to decontaminate the land, making it suitable for community leisure and recreational use.

## Action

Stage 1 involved traditional earthworks and recovering £850,000 worth of saleable coal and coke products. Overburden and discarded materials were used in restoration work and concrete foundations removed.

Decontamination, Stage 2, involved physical, chemical and biological solutions.

A vertical bentonite cut-off wall with hydraulic conductivity was constructed, using a 'Vib Wall' technique, to isolate the contaminated area from the adjacent River Derwent.

Benzene vapours were removed by two Dual Vacuum Extraction Plants, aerated and released into the atmosphere.

Contaminated water was processed in a specially constructed treatment plant. Other contaminated materials were sealed within a specially constructed, permanent encapsulation area.

Lined, cut-off ditches were formed to prevent rainwater transferring contamination to unspoiled land and water.

All soils were periodically tested until they reached safe levels, before being redistributed around the site.

The project attracted widespread interest resulting in Hall Construction's Director of Planning being invited to speak at a NATO Committee for Challenges to Modern Society conference at Oxford University. The scheme became a case study for that committee's Pilot Study Group.



## Hallconstruction

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