PORT DUNDAS RESEARCH & DEVELOPMENT PROJECT	
Description:	Trials of Remediation Techniques
Form of Contract:	n/a
Duration:	1 year
Contract Value:	n/a
Client:	n/a
Clients Representative:	n/a

I & H Brown recognises the increasingly important role that technology-based remediation techniques have to play in the clean-up of contaminated land. We are pleased to have been involved in a project in Glasgow that was aimed at increasing knowledge and confidence in the use of a range of approaches.

The demonstration project at Port Dundas was initiated and led by I & H Brown in partnership with British Waterways, Strathclyde University and Envirocentre. It was carried under the auspices of a government-assisted scheme to promote knowledge transfer between Universities and Industry. Funding came from the industrial partners and from Landfill Tax Credits.

The scheme began with the investigation of a contaminated site and the identification of a number of techniques that were considered to have potential for success in dealing with hydrocarbon contamination of groundwater from spilled fuel. We were also invited by British Waterways to review options for dealing with silts from the canal adjacent to the trial site that were contaminated by heavy metals.

The interesting and innovative options for the contaminated land were the insitu injection of **Oxygen Release Compounds** into the contaminated plume and the application of **Multi-Phase Extraction** to remove contaminants and to enhance inflow of air to promote microbial activity in the soils. Monitoring after completion of the trial period suggested that technologies were worthy of trialling on a larger scale.

By contrast, the contaminated silts were used to trial a range of **stabilisation** and **solidification** options that might assist the sustainable re-use of the silt. Our trials indicated that stabilisation could be used beneficially in the production of an effective plant growth medium. Solidification would certainly assist in producing a structural backfill material and also showed potential in the manufacture of blockwork.

At every stage of the project we worked closely with Regulators, to share our developing knowledge and to seek their views on the legislative issues around the potential re-use of the contaminated materials.