

The cost effective way to remediate contaminated soils on site and improve their geotechnical properties



In redeveloping a brownfield site, the treatment of its contaminated land is often a major issue and cost. The withdrawal of the landfill tax exemption for contaminated land remediation projects now presents developers with increased disposal costs. For redevelopment projects to succeed both financially and environmentally, many developers have called for a cost-effective remediation solution, which can be carried out on-site. It has now arrived in the form of Envirobind.

Envirobind fulfils the criteria for a rapid, cost-effective and sustainable on-site remediation technology

Envirobind is suitable for the on-site remediation of most pollutants including hydrocarbons and inorganic contaminants, such as metals. It can be applied to most of the soil types found in Britain. The exact formula for Envirobind is tailored to each project, so it deals effectively with the specific cocktail of contaminants at each site.

Envirobind now removes, or significantly reduces, the need for off-site disposal and vehicle movements, resulting in tipping charges and land fill tax being greatly reduced or even eliminated. In addition to this a lower carbon footprint for the development will be achieved.

By comparison with conventional on-site remediation techniques, Envirobind is a fast process. It requires just a one-off application by specialist plant for mixing supplied by Metro.

The use of Envirobind will accelerate project programs, limiting time on site and pre-construction activities. Unlike other on-site remediation techniques, it has no restriction on the size of site it tackles.

Improving the engineering properties of treated soils and reducing the need for imported fill

With the introduction of Envirobind the moisture content of soil reduces and this improves its compactability, density and strength. It subsequently creates a high-quality reinstatement material.

After treatment with Envirobind, materials that might previously have been taken to landfill are now re-used on-site as structural fill, a sub-base or as a construction platform (see the example below). This reduces or eliminates the need for imported engineering fill.

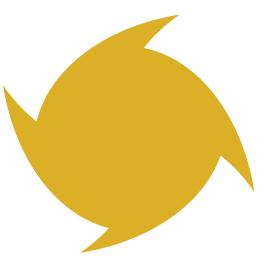
In Britain this type of technology enjoys the support of WRAP (Waste & Resources Action Program). It is also encouraged by the Environment Agency as the way forward in the treatment of contaminated land and in the sustainable improvement of soil properties.

Schematic of Envirobind Application Construction Condition 200mm Concrete pavement to service yard or ground slab to building 150mm Envirobind construction platform to 100% CBR+ 300mm Envirobind subbase to 30% CBR Depth up to 2m Envirobind structural fill to 5% CBR

The withdrawal of the landfill tax exemption for contaminated land remediation projects has made cost-effective on-site remediation technology a critical factor in the success of brownfield site redevelopment.



At the heart of Envirobind is a new stabilization and solidification method. Made from a cementitious material, it is added to soils to stabilize and solidify them. It seals all contaminants into its mix and reduces their mobility that prevents further significant risk to human health and the environment.



Envirobind is part of the Metro Group's wider service package for brownfield site redevelopment

During the Envirobind process, we work closely with independent environmental scientists to:

- Conduct desk top studies (phase 1).
- Conduct site investigations & quantified risk assessments (phase 2).
- Prepare a remediation strategy report and gain agreement from the Local Authority & Environment Agency.
- Oversee and monitor the Envirobind application on site.
- Prepare a validation report and achieve site sign off by the Local Authority & Environment Agency.

Envirobind is part of a comprehensive turnkey redevelopment package offered by the Metro Group. Our other services include:

- Asbestos surveys & removal (HSE Licensed).
- · Demolition engineering.
- · Demolition.
- Bulk dig (cut & fill).
- · Removal of slabs and hard standings.
- Removal of underground obstructions.

envirobind

Cuts your development costs by:

- Accelerating your project's programme.
- Decreasing your pre-construction activities.
- Locking in and stabilizing your site's contamination.
- Improving the strength of your soils.
- Enabling on-site recycling.
- · Reducing landfill.
- Reducing import material.
- Reducing your carbon footprint.
- Giving you a sustainable solution.
- Being suitable for sites of all sizes.
- Positive contribution to your site waste management plan.







Liberating brownfield site redevelopment

Here's how we can help:

Route 1

For sites with existing information, we will:

- Review your existing reports.
- Prepare a remediation strategy for you.

Route 2

For sites without information, we will:

- Carry out an independent desktop study.
- Undertake an intrusive investigation to determine your site's conditions.
- Conduct a risk assessment and develop a remediation strategy.

In addition to Route 1 or 2, we will:

- Provide a provisional budget for the remediation work.
- Obtain approvals on your behalf for the remediation strategy.
- Carry out field trials to confirm the Envirobind formula and confirm the cost.
- Undertake the Envirobind remediation.
- Arrange for the remediation to be independently validated.
- Obtain remediation approval sign off by the Local Authority and Environment Agency.

Don't waste money on your brownfield site redevelopment. Think again about a sustainable solution with Envirobind.

Contact us today to discuss how Envirobind can give you a rapid, cost-effective and sustainable solution:

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