

Site Investigation | Risk Assessment

Investigation of Brownfield site to meet planning conditions pertaining to residential development at an East London former Transport Depot.

Ecologia undertook a site investigation with final validation on behalf of a property developer on a Brownfield site in East London. The site had been a transport depot with the added complication of an un-quantified historic landfill site against two of its boundaries.

Since the Environment Act 1990 and implementation of Planning Policy Statement 23, an additional clause is now frequently incorporated into the planning conditions.

Typically:

“No development approved by this permission shall be commenced prior to a contaminated land assessment and associated remediation strategy”

This usually comprises but is not limited to:

- **Desktop Study and Site walkover** – historical land use, environmental settings and creation of a conceptual site model.
- **Site investigation** - intrusive works to analytically assess soils, soil gas, surface water and groundwater for contamination and provide risk assessment and remedial recommendations
- **Remediation** - site specific methodologies designed around the type and concentration of contaminants found.

The site in East London was at risk from the previous use as a transport depot and the direct boundaries with the landfill site. Ecologia undertook a site investigation comprising trial pits and borehole installations to enable a wide range of sampling:

- **Soils**
- **Landfill Gas**
- **Groundwater**

There was no surface water at risk either on the site or from the site.

Despite the fact that no landfill gas was detected on site, the developer took the precaution of introducing a gas resistant barrier in the new buildings to prevent future ingress if conditions at the landfill site were to ever change.

The main contaminant found at site was the presence of surface distributed asbestos that had been generated by the demolition of the previous structures and not adequately removed from site. In the same area the top 0.5 m of made ground was unsuitable for garden areas.

The remediation strategy was a partial surface strip of unsuitable materials to 0.5 m below surface ground level after the removal of the asbestos.

Nearing completion, validation testing was completed by means of small shallow trial pits in each garden area to confirm the site met the current guidance on suitability for residential use.

