

Guidance for developers and consultants on the verification of cover systems on development sites affected by contamination.

The guidance is intended for contaminated land sites which are regulated through the planning regime. However, the advice contained in this note may be equally valid whenever imported soils are used on development sites. As part of a planning consent a remediation strategy/scheme will have been produced and agreed with the Council. This may involve the creation of a cover system which is to act as a barrier to underlying residual contamination and thereby reduce exposure of future site users.

In order to fully discharge a planning condition relating to land contamination in such cases it will be necessary to provide a verification report to demonstrate that the required depth of cover has been achieved and that contamination levels used in the soils used in the formation of the cover system are acceptable. The verification report must be prepared under the direction of a suitably qualified person (for definition see Section 2.4.5. of Planning Policy Statement 23: Annex 2).

The recommended depth of imported topsoil/subsoil should be specified in the remediation strategy for the site and agreed with Birmingham City Council prior to development commencing. The required depth will be dependant upon the type and concentration of contaminant(s) that remain in-situ, and the proposed future use of the site. More information on the requirements for cover systems can be found in BRE 465 (2004).

Generally a depth of 600 mm will be required in private residential gardens unless otherwise agreed with the Council. Less cover may be acceptable in general landscaped areas.

Verification that the required depth of cover has been achieved is required and this can take the form of a topographic survey or a visual inspection at numerous points across the site supported by photographic evidence.

Details of the supplier and confirmation of the source(s) and total quantity of imported soil material must be stated in the verification report.

The soil should be free from asbestos, metals, plastic, wood, glass, tarmac, paper and odours associated with contaminated soils and otherwise comply with the requirements of BS 3882:2007 – Specification for topsoil and requirements for use.

Sampling and analysis will be required to demonstrate the chemical suitability of imported soils. Please note that analytical certificates submitted by the supplier of the soil material will not be acceptable; i.e. independent sampling and analysis must be carried out.

The samples shall be analysed at an independent accredited laboratory for an analytical suite which should include as a minimum Metals, PAH (speciated), TPH fractions (speciated), soil organic matter content, and pH.

A sampling frequency of 1 sample per 40 m³ is required where the soils are from a natural source. A minimum of 3 samples are required. For larger amounts of soil from a single source the sampling frequency can be reduced by agreement with Birmingham City Council.

For recycled or manufactured topsoil, or where the source of the soil is unknown, a sampling frequency of 1 sample per 20 m³ is required. Again a minimum of 3 samples are required.

The analytical results should be compared to Soil Guideline Values (SGV) published by the Environment Agency where available and the site conceptual model indicates compatibility. Where no suitable SGV is available the results should be compared to relevant Generic Assessment Criteria (GAC), or to levels which have been previously agreed in the remediation strategy.

If the results of the analytical testing show concentrations of contaminants which may be a risk, then the soil must be removed off site or remediated subject to the approval of Birmingham City Council.

References

Planning Policy Statement 23 Annex 2, Development on Land Affected by Contamination. Office of the Deputy Prime Minister (2004).

British Standard BS 3882:2007 Specification for topsoil and requirements for use.

BRE 465. Cover Systems for Land Regeneration (2004).