



Contaminated Land and Asbestos In Soils

Lucion Infrastructure utilises the UK's largest asbestos testing and inspection facility. Our in-house laboratory is UKAS ISO 17025 accredited for asbestos in soils identification, analysis and quantification using Scanning Electron Microscopy (SEM).



What is asbestos contaminated land?

In the UK there is a legacy of land affected by contamination. Land can become contaminated in a number of ways, such as historic past land use or present site use with substances that may pose a risk to health or the environment. A risk based process is typically carried out when managing or dealing with contaminated land.

We work closely with our clients to manage the risks by assessing, investigating and quantifying the extent of land contamination to satisfy regulatory / planning requirements, including the management of on site control and mitigation measures.

We have had considerable involvement in CIRIA Project Steering Groups for the development of published asbestos in soil guides (C733 / C765) and we have supported asbestos in soil industry guidance (CAR-SOILTM).



Why should made ground and soils be tested for asbestos contamination?

Asbestos in made ground and soils is predominantly immobile, although when contaminated ground soil is disturbed, fibres are more likely to be released and pose a risk to both individuals and the environment.

In traditional building surveys, there is no requirement to undertake a quantitative assessment for asbestos, with regulations instead focusing on the type of Asbestos Containing Material (ACM) in use rather than the percentage content of asbestos.

However, for those involved in contaminated land projects, there are many legal and regulatory obligations that need to be considered in relation to the potential asbestos contamination of soils and made ground. Control of Asbestos Regulations 2012: Interpretation for Managing and Working with Asbestos in Soil and Construction & Demolition materials: Industry Guidance (also known as CAR-SOIL) requires employers to assess any potential exposure to asbestos faced by employees. Environment Agency regulations require the quantification of asbestos in soils is determined so that an assessment can be made in relation to hazardous waste handling arrangements and human health risk assessments.

Quantitative measurement of any asbestos included in the soil is a fundamental requirement in relation to occupational exposure and the subsequent determination of the most appropriate removal, disposal or soil re-use arrangements. Many scientific studies have been used to link the quantity of any asbestos present in made

ground or soil is a potential risk of allowing airborne fibres to be released during disturbance work, potentially putting both individuals and the environment at risk.

How can exposure to airborne asbestos fibres from made ground and soils be prevented?

To meet all regulatory requirements, and to ensure that the potential presence of asbestos in soils is assessed in the required manner, soil samples need to be assessed in a formal tiered process to identify if asbestos is present (qualification), in what composition (type determination) and in what quantity (quantification).

The thorough analysis of soil, provides the accurate quantification of any asbestos fibres present as a percentage of the overall mass. This, in turn, can be equated to occupational risk and the practices associated with its removal and disposal or re-use.

How can Lucion help you to protect individuals and achieve compliance?

Working with the Construction Industry Research and Information Industry Association (CIRIA), we have supported the development of new and practical interactive tools to help groundworkers and other construction site workers manage asbestos-contaminated materials on site.

Our experiences working with CIRIA and achieving UKAS accreditation for Soil Sampling and Scanning Electron Microscopy (SEM) analysis means our environmental consultants can offer a range of contaminated land services, tailored to provide a solution that will help deal with the most complex scenarios in an efficient and cost effective manner. Our range of services include:

- Preliminary Assessment of Asbestos Containing Materials (ACM) & Asbestos In Soils.
- Contaminated Land Appraisals (Phase 1) and Ground Investigations (Phase 2)
- Laboratory Testing (UKAS Accredited)
- Asbestos Management Plan
- Remediation Strategy
- Validation / Verification Supervision & Reporting
- Waste Classification Reporting

What are my responsibilities?

If you own or manage a site, our team of Environmental Consultants provide a pragmatic approach to satisfy planning conditions, compliance with environmental regulations and / or manage asbestos risks (CAR 2012).

We help you mitigate the risks of hazardous contaminated land. Working alongside our team of specialist hazardous material surveyors we are able to ensure a best practice approach, from the initial site review and desktop study, through to intrusive site investigation and site remediation.