

Background

The LK Group (LK) offers a wide range of contaminated land related services tailored to suit our client's requirements. Our experienced staff will discuss your needs and recommend the best options available to you.

LK supply contaminated land services to a wide range of private companies and public bodies to assist in satisfying planning conditions, identifying liabilities associated with land transfers and assisting local authorities in Part 2A investigations and determinations.

All LK investigations and risk assessments are undertaken in line with the latest UK guidance which recommends a phased approach to carrying out contaminated land work.

Phase I Desk Studies

A Phase I desk study or Preliminary Risk Assessment (PRA) is a key document in any contaminated land assessment and is fast becoming a statutory requirement (under PPS23) to accompany a planning application for a sensitive development such as housing.

LK offers a comprehensive PRA service which includes the collation of relevant environmental information for your site such as historical mapping, aerial photographs, water quality data, landfill data, coal mining, ground instability and geology.

We also undertake a site walkover to gain a fuller understanding of the site and its setting (a requirement in PPS23). In accordance with current guidance and best practice, this information is used to create a Conceptual Model which will identify the presence of any potential pollutant linkages associated with the site and the potential for any significant contamination which will require further assessment.

Phase 2 Geoenvironmental Investigations

LK offers a comprehensive site investigation service which can address contaminated land and groundwater issues in combination with undertaking geotechnical site investigation and/or coal mining investigations.

LK design and undertake full supervision of the site works using our highly trained and experienced staff. Our staff undertake site investigations with recourse to current guidance such as BS5930, BS10175, CIRIA C659 and CLR11 and whilst on-site are able to make instant informed decisions based upon site conditions.

As well as utilising tried and trusted intrusive techniques such as trial pits and boreholes we can also offer non-intrusive works such as geophysical surveys, which we have used previously in searching for mineshafts and landfill boundaries.

Risk Assessment

Both human health and groundwater risk assessments form a crucial part of any contaminated land investigation. There are generally two types of risk assessment. Generic Quantitative Risk Assessment (GQRA) and Detailed Quantitative Risk Assessment (DQRA).

- GQRA: In a GQRA, LK staff use appropriate published standards and guidelines for standard land-uses (such as housing with and without private gardens or commercial and industrial sites) to assess the contaminative status of a site. This assessment is then used as a basis for deciding if the site requires remedial action.

Risk Assessment

- DQRA: A Detailed Quantitative Risk Assessment (DQRA) may be appropriate for non-standard land-uses such as playing fields or areas of open space or for contaminants where there are no published standards and guidelines. In such cases, LK can generate Site Specific Assessment Criteria. This involves close liaison with regulatory bodies and the Health Protection Agency.

A major advantage for our clients is that a DQRA can allow a more realistic risk assessment, reflective of actual site conditions which can often reduce the remedial requirements and, therefore, project costs.

Phase 3 Remedial Design and Validation

The time and effort spent successfully undertaking and completing the Phase I and Phase II reports is squandered unless appropriate remediation and validation works are undertaken. The Phase III (or remediation and validation stages) can ultimately lead to reduction in risk from contamination, discharge of planning conditions and successful completion and sign-off of developments.

LKA have a wealth of experience in the design of remedial strategies and the application of innovative remediation techniques. Our recent project experience includes the use of cement based solidification and stabilisation techniques and both in-situ and ex-situ bioremediation of fuel spills.

A key consideration is the validation of the remediation and to achieve this LKA undertake prior liaison with the Local Authority, Environment Agency and NHBC.

Geotechnical Investigation

Geotechnical testing and investigations are regularly undertaken in conjunction with a geoenvironmental investigation. In-situ tests within boreholes and trial pits including Standard Penetration Tests (SPTs), CBR tests for roads and car parks are common practice in most investigations.

LK are also capable of undertaking soakaway tests and producing associated calculations to assist in the design of soakaways and septic tanks in accordance with NHBC and BRE guidance.

Further Information

For further information please contact Colin Crompton on:

Tel: 0161 763 7200

