

Phase 2 Intrusive Investigations

Stage 1 LCRM – Generic and Detailed Quantitative Risk Assessment

Site investigations are conducted to understand the subsurface of a site with relation to its Geo-Environmental assessment.



This may include sinking boreholes and trial pits, soil contamination testing, testing of coal tar macadam surfacing, ground gas and groundwater level monitoring, groundwater contamination, investigation of potentially worked coal seams (Coal Authority), and an initial geotechnical assessment of the ground conditions for foundation design.

See also: Window Sampling, Cable Percussive Boreholes, Rotary Boreholes and Trial Pitting.

What is it?

The Land Contamination Risk Management (EA, 2020) guidance Stage 1 process requires further information and refinement on the risk assessment process for the Source – Pathway – Receptor contamination linkage.

Usually following on from a Phase 1 Desk Study an intrusive investigation is designed to understand the subsurface regime at the target/application site. These are usually required in line with current guidance including the Environment Agency's Land Contamination Risk Management Strategy that is a driver for inclusion in Planning Conditions present within in Planning Application Decision Notices.

Unless there has already been such investigations or suitable information provided then, usually, prior to commencement, on-site service (gas sewers, electricity, etc.) information and utility tracing is usually conducted or as a minimum a borehole clearance survey is provided to give our investigation team more confidence in not drilling through these.

All site investigation techniques, scopes, costs and variables/extra-overs are agreed with the client prior to attendance.

Where possible any intrusive investigation schemes are discussed and agreed with the Local Planning Authority prior to site attendance.

A variety of drilling rigs and techniques (e.g., Window Sampling, Light Cable Percussive, Rotary, Trial Pitting, etc.) can be used to investigate a site using our approved and specialist sub-contractors.

We have experience in investigating a range of sites and our portfolio includes:

- Industrial and Commercial Sites
- Quarries and Brick Works Ground Gas and Contamination Issues
- Modern and Old Housing Estates
- Former Mill Sites
- Infilled Canal and Pond Sites
- Agricultural Sites
- Greenfield Sites (e.g., with poor ground conditions)
- Canal and River Embankments
- Former Foundries
- Former Gas Works
- Former Scrap Yards
- Cemeteries
- Council Allotments
- Sewage Works

What is contained in a Phase 2 Intrusive Investigation Report?

- Investigation locations
- borehole/trial pit logs
- soil contamination testing data
- macadam testing data
- contaminated soil assessment for human health
- soil waste assessments to WM3
- macadam assessments to WM3
- soil landfill classification assessments
- gas monitoring data and assessment to BS8485/CIRIA C665
- site conceptual model refinement and a Remediation Options Appraisal if this is required (precursor to a Remediation Method Statement).

Where requested there could also be a separate report for foundation recommendations.

How are the reports presented?

Our reports are provided in PDF format via email.

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