

Contaminated Land Services for Local Authorities

- ▶ Strategy
- ▶ Inspection
- ▶ Assessment
- ▶ Remediation



Whether you require occasional advice or are looking for a committed partner to support you in your contaminated land inspection strategy, ESI can help.

We have an impressive track record in helping Local Authorities to discharge their regulatory duties under both Part IIA and the Planning regime.

Our clients benefit from our knowledge of the fast-changing landscape of regulatory guidance and best practice, and trust our friendly and reliable service.



Our services

Inspection strategy design. ESI uses effective data capture, GIS and bespoke risk ranking tools to enable robust site prioritisation

Site investigation design and management, including specialist approaches for the investigation of residential properties, in situ soil quality testing and real-time data transfer

Human health risk assessment including toxicological appraisal, DQRA, assessment of 'SPOSH' and unambiguous determination advice

Soil gas risk assessment. ESI's landfill team provide expert inputs to the characterisation, assessment and management of soil gas regimes

Controlled waters and ecological risk assessment using a range of approaches from simple analytical solutions to complex modelling software

Specialist data management and statistical services to inform and support determination decisions, including the review of site investigation designs, appropriate site zoning, selection of representative concentrations and decision error analysis

Peer review of contaminated land assessments for planning applications, land divestments and Part IIA determinations

Remediation options appraisals based on an informed evaluation of potential technologies, practical constraints and cost implications

Remediation services designed to maximise the benefits of clean-up through independent planning, supervision and validation

Divestment support and liability assessment to assist Local Authorities with the assessment and divestment of their own landholdings

Public communications including development of communication strategies, resident liaison, attendance at public meetings and working with professional PR teams

Expert witness services to support legal claims and challenges

Technical training covering all aspects of contaminated land inspection, assessment and remediation, including the provision of bespoke courses

Landfill services from permitting to closed landfill risk assessment

Our track record

Painswick gas works Part IIA remediation: Stroud District Council

ESI designed and supervised a residential site investigation at a former gas works. Human health risks were assessed by evaluation of soil quality data (using the CLEA software and Statistics Calculator) and monthly indoor air monitoring results. The site was determined on the basis of our report; we then designed, implemented and verified a successful site remediation programme.

Brownfield redevelopment at Kimpton Industrial Estate: London Borough of Sutton

ESI managed a two-year programme of site investigation and risk assessment, including a variety of intrusive investigations across an area of some 70,000 m². We developed generic human health screening values for numerous potential contaminants and provided detailed advice on a range of issues including waste management.

Phase 1 and 2 investigation of Ludlow gas works: South Shropshire District Council

This former gasworks site is situated on a minor aquifer close to the banks of a river, with complex land ownership including residential and commercial land users. Detailed Quantitative Risk Assessment confirmed that receptors may be at significant risk and informed a programme of further data collection and site characterisation.

Former petrol station Part IIA investigation: Redditch Borough Council

A variety of investigation techniques were used to inspect residential and commercial properties. Appreciable diesel free product and methane were encountered. Full forensic soil, gas and free product analyses were used to inform a detailed risk assessment using RISC, CLEA v1.04 and the Remedial Targets Methodology. The site was determined based on the potential for ongoing pollution of a minor aquifer.

Past IIA investigation of Ebley landfill: Stroud District Council

ESI investigated and assessed the human health and controlled waters risks relating to a former Council waste tip on the banks of the River Frome. Hydrogeological characterisation was achieved through expert field observations, hydraulic testing, automated water level monitoring and in situ water quality testing. Soil gas risks were identified in relation to residential properties and ammonia pollution of a minor aquifer and surface waters was established.

Statistics and SPOSH assessment: Camden Borough Council

ESI were asked to give advice on 'background' concentrations of lead and arsenic associated with Victorian residential land use across the Borough. The work included the derivation of SPOSH concentrations based on toxicological review and variation to CLEA modelling parameters, along with statistical analyses designed to both assess human health risks at different levels of confidence and to evaluate the sufficiency of the available data set.

Residential site investigation and remediation: Industrial Client

ESI supported a large pharmaceutical firm with a voluntary programme of site investigation and remediation at a former industrial processing plant. Activities included soil and groundwater sampling at over 250 houses, a number of commercial premises, a school and a nature reserve. Over 8500 soil samples were analysed. Specialist data management enabled a comprehensive human health risk assessment, using the CLEA methodology. ESI assisted in the face-to-face communication of results with local residents; we were then responsible for the design, supervision and reporting of a remediation strategy involving ten residential properties.





Our approach

ESI is a dynamic, independent company, formed in 1996. With sister companies in the USA and mainland Europe, we have grown to be internationally recognised as a leading environmental consultancy providing practical solutions to soil and groundwater problems.

ESI is able to offer a technical and management team that is second to none. We are proud to employ experienced and enthusiastic staff with the collective skills necessary to deliver on a wide range of contaminated land projects.

We have a proven track record in supporting Local Authorities:

- ▶ We provide robust and unambiguous advice, based on a clear understanding of our clients' needs.
- ▶ We aim to provide Local Authorities with the appropriate level of scientific evidence required to inform and justify their decisions.
- ▶ In all cases our assessments are based on sound regulatory and conceptual understanding.
- ▶ Our work is typified by an open and pragmatic approach to problem solving.

Please call if you think we can be of assistance – we'd be delighted to hear from you.

For further information on ESI's services to Local Authorities please contact our Director of Land Quality Services, **Hannah Fraser**

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