



The Development of Potentially Contaminated Land: Informal Advice for Developers and their Advisors

Contaminated Land Document CL- 02
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INTRODUCTION

In common with most urban authorities, a high proportion of the planning applications received by Gloucester City Council Planning Department are for previously developed sites, where the potential for contamination exists.

This guidance is intended to assist developers, planning agents and other professionals who are involved with the redevelopment of potentially contaminated land.

This booklet does not comprise comprehensive guidance, however, and careful consideration should also be given to the other enclosed references.

GLOUCESTER'S HERITAGE

Along with many other parts of the UK, Gloucester has a long and proud industrial history. Significant expansion of the city took place at the end of the 18th Century, with Gloucester becoming home to numerous industries including timber treatment, chemicals production, boatbuilding and a large range of manufacturing.

These, and many other industrial activities, often resulted in contamination of the ground, which, if not properly dealt with, can pose an ongoing risk to public health or the environment.

THE DEVELOPER'S RESPONSIBILITIES

The Government recognises potential land contamination as a material planning consideration and that the development phase is the most cost-effective time to resolve any problems. The Government's approach is set out in Planning Policy Statement 23: Planning and Pollution Control.

It is the developer's responsibility to ensure that development is safe and to satisfy the Local Planning Authority that any risks from potential contamination have been adequately addressed.

To this end the developer should carry out an adequate assessment of the site, considering the potential for contamination, including where necessary a ground investigation to confirm the contamination's level and extent. If significant contamination is identified then appropriate remediation should be undertaken to render the site suitable for its intended use.

Failure to properly address contamination issues during development could lead to a future liability under the Contaminated Land Regulations (Part IIA of the Environmental Protection Act 1990). Other liabilities may arise from the subsequent pollution of controlled waters, failure of building materials or civil claims resulting from alleged health effects.

In addition the developer has a responsibility to protect the welfare of construction workers operating on potentially contaminated sites and to adequately manage other potential environmental impacts of development, such as dust and odour, as well as the appropriate management and disposal of any contaminated spoil.

THE LOCAL PLANNING AUTHORITY'S RESPONSIBILITIES

The Local Planning Authority has a duty to take account of all material planning considerations, including potential contamination, when considering an application.

Where there is reason to believe land may be contaminated, or the proposed development is particularly sensitive to potential contamination (such as housing with gardens or a school), a planning condition is likely to be applied to any planning approval notice. The condition will require adequate investigation and remediation of the site.

Where contamination concerns are anticipated on a development, developers are strongly encouraged to engage in pre-application consultations with both the Council's Contaminated Land Officer and the Environment Agency. Submission of a desk-study report or other supporting information with the application will assist the decision making process.

In certain circumstances, where potential risks are considered especially significant, a full assessment including ground investigation, may be required in advance of planning approval being issued.

THE ROLE OF OTHER ORGANISATIONS

The *Environment Agency* is a statutory consultee for many planning applications where development is proposed on potentially contaminated land or close to surface water features like streams or canals. The Environment Agency have a duty to protect groundwater and surface waters and the developer will need to ensure that any concerns of the Environment Agency are satisfied.

The *Building Control Inspector* will also need to be satisfied that any risks to the development from potential contamination have been adequately addressed. The Building Regulations require that builders demonstrate that hazards from potential contamination have been properly assessed and appropriate measures put in place to address any risk. Most new building warranties require some level of assessment to have been carried out, if contamination is suspected at a site.

REPORTING REQUIREMENTS

It is vital that redevelopment of potentially contaminated land is undertaken in a transparent and open manner. This will maintain public confidence in the development of potentially contaminated sites and minimise any potential for future property blight. Maintaining a comprehensive record of the assessment and actions undertaken will also assist the Council in allowing any future enquiries regarding the development to be answered effectively.

When submitting any planning application the applicant should indicate whether they consider the site might be contaminated.

Where a developer is proposing to develop land suspected of being contaminated, they are strongly advised to contact the Council's Contaminated Land Officer before submitting an application, as they may hold additional information that may be of importance.

The extent and detail of the assessment and investigation work undertaken should reflect the size of the site, its complexity, the sensitivity of the development and the likely contamination risks.

There are four essential elements to how a potentially contaminated site should be tackled within the planning process. The tables in this document provide an *overview* of the content of each of these phases and what should be included in the reporting of each stage of work.

These tables provide an overview only and should not be considered to represent an exhaustive list of requirements or comprise comprehensive or definitive guidance.

A more detailed description of the various stages of investigation of a potentially contaminated site can be found in CLR 11: The Model Procedures, published by DEFRA 2004.

Phase I Report (including Desk Top Study)	
a	Purpose and aims of the study
b	Plans of site location and layout
c	Assessment of the site's Environmental Setting <ul style="list-style-type: none"> - geology, hydrogeology, hydrology - information from the Environment Agency <i>pollution incidents, abstractions, discharges etc</i> - information from Gloucester City Council <i>potentially contaminated land, previously submitted reports</i>
d	Review of historic mapping
e	Assessment of current and proposed site use
f	Review of previous site investigation reports and information
g	Findings of site walkover
h	Initial risk assessment <ul style="list-style-type: none"> - development of conceptual model for the development - assessment of possible pollution linkages
i	Assessment and recommendations <ul style="list-style-type: none"> - proposals for intrusive investigation, if required

Should the Phase I assessment indicate that no contamination concerns exist then no further action is necessary. The Phase I report should still be submitted for confirmation that this is the case before proceeding.

Phase II Report (including Intrusive Site Investigation)	
a	Reference to the Phase I Report and any other relevant reports
b	Aims and objectives of the investigation
c	Site investigation methodology <ul style="list-style-type: none"> - methods of investigation - plan showing investigation locations, with justification - sampling and analytical strategy
d	Factual results and findings <ul style="list-style-type: none"> - details of ground conditions - details of chemical testing results
e	Development of conceptual model for the site
f	Risk Assessment <ul style="list-style-type: none"> - considering all potential linkages identified in the conceptual model - comparison of results against generic screening values - further assessment of results as necessary - any risk assessment to be justified and the approach documented
g	Assessment and Recommendations <ul style="list-style-type: none"> - proposals for remediation / mitigation, if required

Similarly should the Phase II Investigation indicate that no contamination concerns exist then no further action is necessary, though again it is necessary to submit the report for approval before proceeding further.

Remediation Strategy	
a	Aims and objectives of the remediation works
b	Details of the remedial proposals <ul style="list-style-type: none"> - works to be undertaken - details of the contamination to be remediated - plan showing details of remedial works - details of programme, timescales and phasing of works
c	Details of control procedures / method statements <ul style="list-style-type: none"> - control of dust, noise and odour - control of surface run-off - traffic management and health and safety measures
d	Details of all required consents, authorisations and licenses
e	Details of how any necessary variations will be dealt with <ul style="list-style-type: none"> - notification of the Local Authority / Environment Agency
f	Details of how the remedial works will be validated <ul style="list-style-type: none"> - proposed remediation standards - monitoring strategy and objectives - details of validation timescales and phasing

The Remediation Strategy should be submitted and approved by the Contaminated Land Officer and the Environment Agency before proceeding to undertake the remedial work.

Completion Report (including Validation Report)	
a	Details of how remedial work was undertaken <ul style="list-style-type: none"> - with reference to Ca) to Cf) set-out in the Remediation Strategy
b	Details of who carried out the work
c	Details and justification for any variations from the strategy
d	Details of waste treatment/processing or disposal; including transfer notes
e	Validation testing and monitoring results and assessment
f	Final confirmation that the remedial objectives have been achieved

All reports should be prepared by appropriately qualified professionals and comply with considered current good practice. A short list of selected good practice guidance is included at the end of this document.

- Accredited drillers should be employed for all investigations.
- Accredited laboratories and methods should be used for sample analyses.
- Reports should contain the details of sampling methodologies - an explanation of why the samples were taken how they were.
- Reports should contain chain of custody information, full laboratory result sheets, borehole and trial pit logs and all necessary plans and drawings.
- Reports should contain the details of any statistical calculations, justification and input/output data sheets for any modelling.
- Photographs should be included whenever possible.

SUBMISSION GUIDELINES

It is strongly encouraged that draft copies of reports be informally provided to the Contaminated Land Officer as part of the ongoing discussions. This is often useful for the purposes of seeking a view on findings or proposals before formal submission to the Planning Authority.

The Contaminated Land Officer will be happy to discuss proposals, findings and other matters at any stage of the development.

Formal submission of reports, for the purposes of discharging planning conditions, should be sent directly to the Planning Officer; three hard copy reports should be submitted.

Additional arrangements may be required regarding submission of reports to the Environment Agency and the Building Control Inspector.

Applicants are strongly encouraged to also submit electronic format reports by CD-ROM, in addition to printed hardcopy reports.

DISCHARGE OF CONDITIONS

Upon receipt of a satisfactory Phase I Desk-Study Report or a Phase II investigation report indicating no further investigation or remediation is necessary, or a satisfactory Completion Report following successful remediation, the Planning Officer will proceed to discharge any outstanding contaminated land conditions. This will actually be implemented in a phased basis, as specified by the condition.

If required a completed Certificate of Completion will be endorsed by the Contaminated Land Officer, detailing the information submitted to the Local Planning Authority for the purpose of achieving discharge of the relevant planning conditions.

This certificate has no legal status other than documenting the discharge of the relevant planning conditions for the development. It does not confirm that the site to be free from contamination, or that it might not, at some later date, be determined to be Contaminated Land (as per Part IIA of the Environment Act), or offer any kind of guarantee against other future regulatory action or enforcement.

ACCESS TO ENVIRONMENTAL INFORMATION

Information held by Gloucester City Council is governed by the requirements of the Environmental Information Regulations 2004, Freedom of Information Act 2000 and Data Protection Act 1998.

The Town and Country Planning Act also requires that all information submitted in support of a planning application be placed on the public Planning Register and be made publicly available, unless certain restrictive circumstances apply.

It should therefore be routinely assumed that all information submitted to the Council will be made available for public inspection.

Intellectual property rights will however normally be respected and duplicate copies of material subject to copyright laws will not be made or allowed.

ENVIRONMENTAL IMPACT ASSESSMENT

Certain applications may fall within the scope of the Environmental Impact Assessment Regulations 1999. Where this is the case an Environmental Statement will be required to support the planning application, as stipulated by these regulations. It is likely however, that additional information concerning land quality will be required to fully assess applications on potentially contaminated sites, in addition to the consideration contained in a typical Environmental Impact Assessment.

CERTIFICATE OF COMPLETION

To be completed by the developer

Development:

Planning Application Reference:

Undertaken Between the Dates of: and

Notes to the Developer:

- 1 - The purpose of this Certificate is to collate and document the investigation and remediation undertaken during this development in order to achieve discharge of the planning condition.
- 2 - Please complete all section that are appropriate.
- 3 - List all reports that apply in each section

Phase I Assessment and Desk-Study

Confirmation that an acceptable Phase I Assessment has been undertaken for the above development, detailed in the Phase I Report(s)*:

Title:	Ref:	Author:	Date:

Phase II Investigation

Confirmation that an acceptable Phase II Intrusive Investigation has been undertaken for the above development, detailed in the Phase II Report(s)*:

Title:	Ref:	Author:	Date:

Remediation Proposals

Confirmation that acceptable remediation measures to afford protection from identified risks have been proposed, detailed in the Remediation Strategy Report(s)*:

Title:	Ref:	Author:	Date:

Implementation of Remediation

Confirmation that the proposed remedial measures were satisfactorily implemented, as per the agreed Remedial Strategy Report, & detailed in the Validation Report(s)*:

Title:	Ref:	Author:	Date:

Imported Soil Quality

Confirmation that all soils imported as part of the development were confirmed to be free from significant contamination, detailed in the Report(s)*:

Title:	Ref:	Author:	Date:

*Approved in writing by the Local Authority

Management of Remediation Works

Confirmation that all site contractors were required to be alert for, and report any evidence of, further, unsuspected contamination, & either none was so identified or having been identified, was satisfactorily remediated, detailed in the Report(s)*:

Title:	Ref:	Author:	Date:

DECLARATION

Signed:	Date:
Person(s) Supervising to Works on Site - please detail position & company:	
Signed:	Date:
On behalf of the Developer - please detail position & company:	
Signed:	Date:
Contaminated Land Officer - Gloucester City Council	
<i>I confirm the above reports were received and found acceptable for the purposes of recommending discharge of the contaminated land planning condition imposed on the development.</i>	
<i>No other warrantee or indemnity from future regulatory action is intended by this Certificate.</i>	

SELECTED GUIDANCE AND RESOURCES

- 1 British Standard BS10175: Code of Practice for Investigation of Potentially Contaminated Sites, BSI (2001)
- 2 The Building Regulations: Site Preparation and Resistance to Contaminants and Moisture, Approved Document C, ODPM (2004)
- 3 CLR7-11 Contaminated Land Reports, DEFRA and the Environment Agency (2002+)
- 4 DOE Industry Profiles, Department of the Environment (1996)
- 5 Framework for Deriving Numerical Targets to Minimise the Adverse Human Health Effects of Long Term Exposure to Contaminants in Soil, SNIFFER (2000)
- 6 PPS23 Annex 2: Development on Land Affected by Contamination, ODPM (2004)
- 7 Publication 66: Guidance for the Safe Development of Housing on Land Affected by Contamination, Environment Agency and NHBC (2000)
- 8 R&D Technical Report P5-066: Secondary Model Procedure for the Development of Appropriate Soil Sampling Strategies for Land Contamination, Environment Agency (2004)

Gloucester City Council Website: Contaminated Land

<http://www.gloucester.gov.uk/Content.aspx?URN=2543>

or search for 'contaminated land' from the Gloucester City Council site

Contamlinks Website

www.contamlinks.co.uk

CIRIA Contaminated Land Website

www.contaminated-land.org

Department of Environment, Food and Rural Affairs (DEFRA)

www.defra.gov.uk

Environment Agency

www.environment-agency.gov.uk

Gloucester City Council Contaminated Land Officer	01452 396 312
Gloucester City Council Planning Department	01452 396 775
Gloucester City Council Building Control	01452 396 771
Environment Agency – National Switchboard	08708 506 506