

Where the PRA has identified potential gas risk, the LPA will expect to receive gas monitoring data collected from appropriate locations on at least six different occasions over a three month period. Monitoring should be targeted to days where atmospheric pressure is low and falling as this is optimal gas migration conditions.

On collection and analysis of the investigation findings using Generic Assessment Criteria<sup>2/4</sup> where appropriate, the conceptual model should then be refined and potential identified risk re-evaluated.

The conclusion of the GQRA should include the pollution linkages identified based on the development of conceptual model; the generic risk assessment criteria used to assess risk (and explanation of); the unacceptable risks identified, if any; and the proposed next steps in relation to the site.

### Cleaning up Contamination (Remediation)

Where an appropriate site investigation agreed by the LPA confirms there is no significant risk to the proposed development, remediation of the site is not required which is consistent to the Governments "suitable for use approach".

Where unacceptable risk is identified, the developer must produce a detailed method of remedial works which is to be agreed with the LPA in writing prior to works commencing.

The purpose of this stage is to consider the risks and design measures to remove the risks that are appropriate to the nature of the intended development.

Successful remediation of a site is dependant upon implementing the scheme to the specified standard. A Verification Report will need to be submitted to the LPA to demonstrate this providing evidence of actions taken.

### Further Guidance and Web Links

1. British Standard BS10175:2001 *Code of Practice for Investigation of Potentially Contaminated Sites*, British Standards Institute, London.
2. Chartered Institute of Environmental Health, *The LQM/CIEH Generic Assessment Criteria for Human Health Risk Assessment 2<sup>nd</sup> edition*.
3. DEFRA and the Environment Agency, *SGV, Tox Reports, and Research Reports CLR7* – 11.  
<http://www.environment-agency.gov.uk/research/planning/33706.aspx>
4. Environment Agency, *Contaminated Land Exposure Assessment*  
<http://www.environment-agency.gov.uk/research/planning/33714.aspx>
5. Office of the Deputy Prime Minister (2004). PPS Annex 2, *Development on Land Affected by Contamination*.  
<http://www.communities.gov.uk/publications/planningandbuilding/pps23annex2>
6. Winchester City Council, *Contaminated Land an Inspection Strategy*  
[www.winchester.gov.uk](http://www.winchester.gov.uk)

Environment Agency [www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

Department of Environment, Food and Rural Affairs [www.defra.gov.uk](http://www.defra.gov.uk)

CIRIA [www.ciria.org.uk](http://www.ciria.org.uk)

National House Building Council [www.nhbc.co.uk](http://www.nhbc.co.uk)

If you require any further advice or information, please contact:

Environmental Protection Team  
Environment Division  
City Offices  
Colebrook Street  
Winchester, SO23 9LJ

Telephone: 01962 840 222 ext 2350

Fax: 01962 840 586

Email: [environment@winchester.gov.uk](mailto:environment@winchester.gov.uk)

Website: [www.winchester.gov.uk](http://www.winchester.gov.uk)

### Planning Advice Note

## Development on Potentially Contaminated Land



## Introduction

Winchester City Council's district is predominantly a rural area with a rich biodiversity. Winchester District contains a diverse landscape ranging from chalk downlands, uplands and river valleys to intimate settled lowlands.

Both historically and currently, the main land uses in the district are agriculture, tourism and housing. Current industrial activity is generally restricted to a number of small-medium sized industrial estates, with a small number of manufacturing operations.

Government guidance recognises potential contamination is a material planning consideration and the most cost effective and efficient time to deal with the 'potential' contamination is at the development phase. Where development is proposed, the developer is responsible for ensuring that the development is safe and suitable for use for the intended purpose. The onus is quite clearly placed on the developer to disclose all relevant information with the application.

## Relevant Information

For a site suspected of possible contamination or change of use to a more sensitive land use (such as residential development) an appropriate risk assessment (carried out by a competent person) will need to be submitted with the Planning Application as part of the new 1APP process. The appropriate assessment will involve a phased investigation and should involve the following<sup>3</sup>:

- Preliminary Risk Assessment

If required the following phases are to be also submitted:

- Generic Quantitative Risk Assessment GQRA (Site Investigation)

- Detailed Quantitative Risk Assessment
- Remedial Method Statement
- Verification Report

N.B. Not all above stages will be required for each site or application, advice and further information regarding this should be sought from the Environmental Protection Team.

## Preliminary Risk Assessment (PRA)

### Desk Study, Site Walkover and qualitative risk assessment

A PRA is used to identify the potential risks that may affect a development and must recognise the influence of the surrounding land and receptors. The PRA is to include:

- A walkover survey including dated photographs
- Location and Site Plan
- Extracts and analysis of current and historical maps identifying potential contaminating features
- Description of ground conditions: hydrology, geology, soil classifications
- Details of nearby sensitive receptors such as controlled waters, water abstractions, sites of archaeological and ecological interest
- Service plans of site such as locations of fuel storage tanks (current and historical)
- Any existing documented records relating to the history of the site

Where potential contaminants exist, the potential risk needs to be identified by means of a 'conceptual model'. This should identify all likely Potential Pollutant Linkages (PPL) associated with the proposed development.

#### Conceptual Model

*Source + Pathway + Receptor = PPL*

Does the PPL = an **Unacceptable Risk**?

The PRA report should conclude what the likely risks are, if any, and recommend what further work is to be required to validate and quantify these risks in the form of a Generic Quantitative Risk Assessment<sup>9</sup> (GQRA).

It is highly recommended that the PRA report should be submitted to the Local Planning Authority (LPA) prior to any further site works proceeding, to ensure they are satisfied with the content, conclusions and recommendations made.

## Carrying out a GQRA

Applicants or developers may choose to carry out a GQRA, which includes a site investigation, prior to seeking planning permission. This is to be encouraged as may demonstrate that further work and therefore a condition is not required. Developers must ensure that the GQRA is designed on the findings of the PRA and target any "hot spots" and also any proposed sensitive areas. It is highly recommended that you agree the extent of such works with the LPA prior to implementation.

The GQRA should be designed to investigate any potential risk identified in the PRA and the investigation should obtain representative soil, ground gas and water samples, where appropriate, for analysis and the results of which are to feed into the risk assessment process.

It is important that applicants understand that investigation works must be undertaken at the earliest opportunity as findings of the investigation can have material cost and time implications. This is especially important in areas of infilled/ raised land as ground gas migration may be a problem.