

Swindon Borough Council

Land Contamination Developers guide for planning applications

2023



LAND CONTAMINATION GUIDANCE

This Guidance has been taken through a process of internal consultation and approval. The versions are noted below and the final approved version will be formally adopted on a date to be shown below.

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1. Introduction

The purpose of this guidance is to make developers aware of what information Swindon Borough Council (as the Local Planning Authority – LPA) requires in order to assess an application for planning permission on land which may be affected by the presence of contamination.

It also provides advice on how to ensure risks from land contamination are appropriately addressed during the development process in line with the National Planning Policy Framework (NPPF).

2. Scope of this document

This guide is intended to prompt engagement with the LPA's Contaminated Land Officer early in the development process. It is not intended as an exhaustive list of requirements.

3. Swindon Borough's Heritage

There is a substantial legacy of contaminated land in the United Kingdom due to its long industrial heritage and past waste disposal practices. There are now various regimes in place to prevent new contamination, however historic contamination remains and still has the potential to adversely affect people's health, as well as water quality, ecological systems and property.

The Swindon area has a long history of industrial activity. Swindon itself is a large industrial town, with a railway heritage dating back to 1840. However industrial activity in Swindon and its environs dates back to the Roman era 2000 years ago when Portland limestone was quarried.

For around 150 years the railway industry dominated Swindon's activities. In later years Swindon has continued to be a major engineering town, in particular manufacturing cars and components. Swindon is also a financial and administrative centre.

In 2023, the largest employment sectors in Swindon were:

- Engineering and Manufacturing, notably automotive
- Distribution and Logistics
- Financial and Professional Services
- Digital Technology
- Medicine and Pharmaceuticals
- Administrative and Support Service Activities

In the past, these types of industrial activities have often resulted in contamination of the land.



FIGURE 1 Restoration of former Railway Works, Swindon

4. What is land affected by contamination?

Contaminated land refers to circumstances where ground has become polluted in some way. Most often, this is as a result of substances being spilt or otherwise deposited from historic industrial activity, but elevated amounts of hazardous substances may be present from natural sources too (such as radon, which is a gas formed by the radioactive decay of small amounts of uranium that occur naturally in most rocks and soils).

If contamination of the land is not properly dealt with, it may pose a risk to public health and the environment.

The Council works closely with regulatory partners, including the Environment Agency, to prevent new contamination from being caused, or to require clean-up by the responsible polluter.

Whereas land contamination is a formal part of the planning process, it may also be considered by the Council where land is not being actively proposed for redevelopment, such as land that has fallen out of use or where planning proposals have been rejected or abandoned. There is a legal framework established to deal with historic contaminated land in England. This is Section 57 of the Environment Act 1995, which created Part 2A of the Environmental Protection Act 1990 (“Part 2A”).

Land is only considered to be “contaminated land” in the legal sense, if it poses a sufficiently high risk to justify action, and meets the criteria for Part 2A ([Link to Part 2a statutory guidance](#)).

5. Roles and Responsibilities

The National Planning Policy Framework (NPPF) sets out roles and responsibilities. Below is a summary of each party’s role.

5.1 Who’s responsible for ensuring the site is suitable for use?

It is the responsibility of the developer to ensure that the land will be suitable for the proposed use. The NPPF requires the local planning authority to view land contamination as a material consideration when deciding planning applications. The Council will ensure that the developer carries out necessary assessments to determine any measures needed to ensure the development process is completed safely and leaves the site suitable for its ongoing use.

The responsibility for dealing with land affected by contamination rests, in the case of land being developed, with the person redeveloping it.

5.2 What’s suitable for use?

A site is suitable for use when it poses no unacceptable risk from contamination.

5.3 The role of the Local Planning Authority

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

The local authority will call on in-house or contracted expertise for specialist support on whether the land is likely to be suitable for the intended use, with or without further intervention.

Where land is suspected of being contaminated the Local Planning Authority will expect technical reports to accompany planning applications.

The Council will also consult on the application with statutory and other consultees.

It may refuse to grant planning permission on land contamination grounds, which is rare, or it may request further information. Alternatively, it may grant planning permission with conditions that require the developer to produce further information and undertake certain activities to improve the land condition.

The Council will ensure that the developer carries out necessary assessments to determine any measures needed to ensure the development process is completed safely and leaves the site suitable for its ongoing use.

On sites where land contamination is anticipated it is strongly advised that pre-application advice is sought from the Local Planning Authority so that all parties understand what is expected of them before development commences.

5.4 Role of the Environment Agency

The Environment Agency engages in the planning process in relation to its responsibilities for matters such as flooding, waste, pollution, biodiversity, coastal erosion and waterways. The Environment Agency

will be particularly interested in sites where there is a risk of pollution to controlled waters. It may require particular measures to address this as part of the development process. Applicants should also check whether an environmental permit is required before development can start.

5.5 The Developer's Responsibilities

The developer is responsible for ensuring that a development is safe and that it is suitable for its intended use, or can be made so through remediation.

Where significant contamination issues are anticipated on a development, developers are encouraged to undertake pre-application consultation with the Contaminated Land Officer (and the Environment Agency where it meets their statutory requirements). Submission of a desk study report or other supporting information with the application may assist the decision making process.

5.6 The role of other organisations

Other organisations may have a role depending on the type or location of development. In particular the Building Control Inspector will need to be satisfied that any risks to the development from potential contamination have been adequately addressed. The Building Regulations require that reasonable precautions are taken to avoid risks to health caused by ground contamination at development sites.

6. The Development Process

6.1 Pre-application checks

On sites where land contamination is anticipated it is strongly advised that pre-application advice is sought from the Local Planning Authority so that all parties understand what is expected of them before development commences. If the current or historic land use is commercial/industrial, a contaminated land risk assessment is likely to be required.

The Council holds information on land in its area which it will normally share with the developer. This may include historical land use information and sometimes detailed technical information on the condition of the ground. The developer is also advised to commission a commercial environmental search to ascertain the site's historical and environmental history.

An overview of the process can be found here: [Land affected by contamination - GOV.UK \(www.gov.uk\)](https://www.gov.uk/land-affected-by-contamination)

Failing to deal adequately with contamination can cause harm to human health, property and the wider environment. It can also limit or preclude new development; and undermine compliance with the [Water Environment Regulations 2017](#).

6.2 Applying for planning permission

When submitting a planning application the applicant should provide information to help determine whether the site might be contaminated. There is a section within the planning application form for this.

The form asks if the proposal involves any of the following:

- Land which is known to be contaminated?
- Land where contamination is suspected for all or part of the site? (Note: this is not restricted to former industrial land but also includes agricultural land and other land such as landfill sites)
- A proposed use that would be particularly vulnerable to the presence of contamination?

If the answer is yes to any of these questions, or if the pre-application checks indicate that the land to be developed may be affected by contamination, as a minimum it will be necessary to submit a **Stage 1 Land Contamination Assessment** (often referred to as a Preliminary Risk Assessment or Phase 1 Investigation) in order for the application to be validated. This is described in more detail below.

6.3 Before and During the Development Process

Whilst the planning application is being considered by the LPA, it may ask for further information to be provided. This might include technical surveys to determine the extent and nature of contaminants at site and confirm contaminant linkages. These are normally required to be undertaken before development commences in order to determine whether any remedial measures are required.

During site works, the developer should maintain contact with the Council's Contaminated Land Officer and consult in the event that any unexpected contamination or ground conditions are found.

6.4 Applying for discharge of contaminated land conditions

The developer can apply for discharge of a contaminated land condition once the requirements of the condition have been met. This might include the completion of site investigations or the approved remediation works. The Local Planning Authority would need to receive from the developer appropriate reports that demonstrate the risks from land contamination to the health of future users and the local environment have been addressed. This should be submitted to the Local Planning Authority accompanied by the appropriate condition discharge application forms and fee. For this process to be valid, developers should submit complete reports, including all appendices and accompanying data directly to the Planning Case Officer and not to the Contaminated Land Officer, except as a copy.

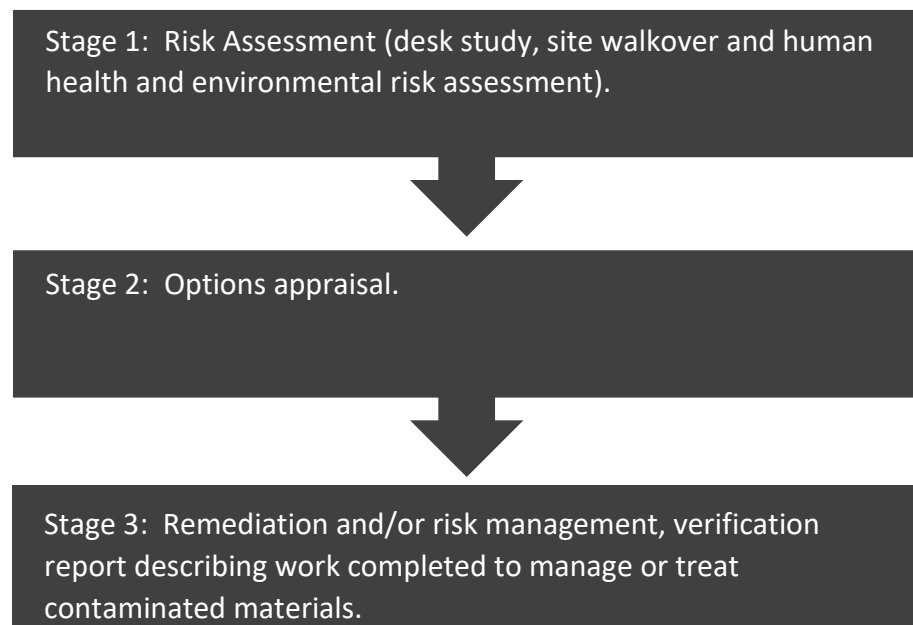


FIGURE 2 Fuel contamination discovered at an industrial site

7. Technical Information to support the Planning Process

7.1 Overview

There are three stages of contaminated land investigation and management that may be undertaken dependent upon the condition of the site. These are:



7.2 Stage 1 Risk Assessment

A Stage 1 assessment is divided into 3 tiers.

Tier 1: Preliminary risk assessment

The preliminary assessment should include a desk-based study (which looks at all the available historical and environmental information), a site walkover, and the generation of a risk-based conceptual model of the site identifying the potential contaminant linkages - sources, pathways and receptors at the site and how they are linked (the “preliminary risk assessment”). It could also include an exploratory (limited) intrusive or non-intrusive investigation.

Required Outputs: A preliminary risk assessment report describing all possible sources of contamination, the 'receptors' on site, and will be brought to site as a consequence of development, the pathways that exist and may be created. Then, a conceptual model to confirm if further investigation or remediation is required. Details of proposed further work. At this point it may be concluded that:

- there are no unacceptable risks and so complete the process
- more information is needed and to proceed to a generic quantitative risk assessment (Tier 2) or go direct to a detailed quantitative risk assessment (Tier 3)
- there are clear risks and decide to proceed to the management/treatment options appraisal stage

Tier 2 Generic quantitative risk assessment

At this point one or more potential contaminant linkages identified at Tier 1 stage may need further assessment. It will be necessary to carry out intrusive site investigation to determine the nature and extent of

contamination present, then compare contaminant concentrations against appropriate generic assessment criteria. Examples of available human health generic assessment criteria include [C4SLs](#) and published [soil guideline values \(SGVs\)](#).

Other criteria are available for other types of linkage, involving water, ground gas and ecology. For more on the use and availability of screening criteria see LCRM here: [Link to LCRM Stage 1 Risk Assessment](#)

Each potential contaminant linkage will be assessed and appraised.

Required Outputs: a generic quantitative risk assessment report which updates the conceptual site model and sets out all of your findings. At this point it may be possible to:

- Show that risks are low enough that no further action is needed
- Decide further assessment, site investigation and monitoring are required to address uncertainties and complete the risk assessment
- Identify unacceptable risks needing detailed quantitative risk assessment or going direct to the options appraisal stage

Tier 3: Detailed quantitative risk assessment

This is to address one or more potential contaminant linkages, identified by the above assessment tiers and that need a detailed assessment. It is likely that detailed investigation will be required at this point.

The investigation should provide detailed site-specific information on substances in or on the ground, geology and controlled waters, and investigate more fully/confirm any possible contaminant-pathway-receptor significant contaminant linkages identified in Stage I.

Investigations should be designed, supervised and reported by a suitably qualified person (see below). It may be necessary to use modelling to derive site-specific assessment criteria.

Upon completion, the developer must make a decision whether there are any unacceptable risks and whether any further action is needed to reduce risks from contamination and proposed actions required to make land "suitable for use".

Required outputs: a detailed quantitative risk assessment report, including all information from the risk assessments and if unacceptable risks are present, proceed to the options appraisal phase.

7.3 Stage 2 Options Appraisal

At this point a decision has been made to remediate the contamination. Therefore it will be necessary to identify, evaluate and select feasible remedial options that are most readily available and applicable to the types of contamination and contaminant linkages. It will be necessary to decide if more than one treatment option is required to deal with multiple contaminant linkages and how these will work in combination or in parallel, in the circumstances of the site.

Required outputs: an options appraisal report, identifying feasible remediation options, evaluating them and setting out the final preferred remediation option(s).

7.4 Stage 3 Remediation and Verification

At this stage the recommendations from the options appraisal, derived from the environmental and human health risk assessment, may be developed into a written strategy setting out how land might be made "suitable for use". A "remediation method statement" (RMS) might be

produced at this point to present details of how the remediation will be undertaken, what methods will be used and what is to be achieved. It will also set out any required ongoing monitoring to demonstrate the effectiveness of the remediation. A clear remediation end point should be stated, such as the site contaminant levels or risk management action to be achieved and how this will be verified.

When the remediation strategy has been agreed by the Council and once the correct regulatory controls are in place measures to reduce or manage the previously identified unacceptable risks due to contamination will be put in place, as set out in the RMS.

Required outputs: a verification report to confirm that the agreed end points (as set out in the RMS) have been achieved and the remediation has been successful or that long term monitoring and maintenance has been proposed, for which the results will need to be reported.

7.5 Special Requirements for Soil Gas verification

The requirements for verifying correct supply and installation of a gas-resistant membrane are set out in BS 8485:2015+A1:2019 operating alongside the CIRIA 735 code of practice. Best practice is that an independent third party is used for verification to avoid conflicts of interest. In addition, integrity testing should be used as well as visual inspection to demonstrate a gas tight seal is present across the membrane. The British Standard sets out reporting requirements: specifically in Table 8 — Information to be included in the design, installation and verification report.

7.6 Sustainable remediation

Government policy is to encourage sustainable methods of remediation. Where remediation work is required on site to manage

contamination risks, the LPA recommends that the principles of sustainable remediation be followed as far as possible. The approach to sustainable remediation is described in ISO 18504:2017 and the principles and best practice are promoted by SuRF-UK: [Link to SuRF-UK Sustainable Remediation Forum](#)



FIGURE 3 Contaminated groundwater removal from a disused chamber

8. Qualifications and site assessors

Contaminated land is a very complex technical discipline and compliance is necessary with an ever-increasing amount of new legislation and guidance. The individual and/or consultancy who is carrying out the site assessment must have the necessary experience, qualifications and skills.

The NPPF requires that technical assessments to support the planning process, such as site investigation information, are prepared by a competent person. This is defined in the NPPF as:

A person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation.

It is essential that a proper scientific and evidence-based approach is taken to the gathering of information about a site. Current good practice should be followed.

There are currently two national accreditation schemes for professionals in land contamination. These are:

- the Specialists in Land Contamination (SiLC) [Find a SiLC | Specialist in Land Condition Register Ltd \(SiLC\)](#) and
- the Suitably Qualified Person register for the National Quality Mark Scheme (NQMS) [CL:AIRE \(claire.co.uk\)](#)

The National Quality Mark Scheme for Land Contamination Management (NQMS) is a voluntary scheme established in 2017 which provides visible identification of documents that have been checked for quality by a Suitably Qualified and experienced Person (SQP).

The NQMS uses an SQP who is a qualified and experienced professional in land contamination. The SQP will check and approve the technical submission and issue a signed “declaration”.

Other schemes exist in relation to specialist aspects such as the SoBRA accreditation scheme for risk assessment or the gas protection verification accreditation scheme (GPVS).

The Council supports any industry effort to improve the quality of information submitted, however all land contamination reports and information submitted to the Local Planning Authority will continue to be reviewed and assessed by the Council’s specialist staff in the normal way. Technical reports are reviewed by the Council not only for their technical quality but for their relevance to the development proposals and in relation to the known history of the site by comparison with the Council’s own data and local knowledge.

The Council expects that site assessors should:

- Be a competent person belonging to an accredited body and able to demonstrate that they operate within a quality assurance system
- Be aware of current legislation as it relates to land contamination and pollution, including health and safety and the relevant codes of practice.
- Use an accredited and quality assured laboratory (UKAS) employing MCERTS methods to analyse samples.

9. When the Council might reject a technical report

As indicated above the Council will expect technical reports to accompany planning applications for land where contamination is a possibility and will undertake a review of the information supplied to ensure that it is relevant and sufficiently detailed.

There are several reasons why a Local Planning Authority may reject a technical submission report, including the following circumstances:

- Some of the information required is missing or there are gaps in the data provided;
- Where information is not clearly presented, requires clarification and where conclusions have not been drawn from the information
- The report does not address sufficiently the concerns of the Planning Authority
- The report has not included technical work previously agreed with the Planning Authority
- Investigations into potential land contamination have deviated from guidelines within relevant British Standards and current UK guidance without valid reason
- The report has not been carried out by a suitably qualified person (in accordance with the NPPF).

The Planning Authority will write to applicants/agents with details of why it has been rejected and ask for a re-submission of an amended copy. If you are unclear about this, you should make an appointment to discuss this with the Planning Case Officer dealing with your development.

Where the Council has rejected a report submitted as part of the application this could lead to delays in the application process and incur

additional development costs, so it is important for all the developer's team to be aware of this and national contaminated land guidance.



FIGURE 4 Borehole drilling within old landfilled wastes

10. Waste management and reuse of materials

Most construction sites will generate materials surplus to requirements and not least soils, generated from foundation excavations, installing underground utilities and so on.

Excavated Material generated by construction may be waste and subject to waste regulatory controls. In general, if the material is to be discarded / surplus to requirements, it is waste and if the material is not fit for purpose and requires treatment to render it acceptable it is also waste.

In times past, the main destination of this material has been landfill sites as waste, however modern approaches seek to find a suitable use for this soil, on or off site. This may result in agreements being reached between developers and their subcontractors to transport surplus soils between sites.

At some sites there is a need to import additional soil. Activities such as bringing in soil from somewhere else to use in landscaping at housing developments may be carried out with a permission known as a “U1 exemption”. This allows the use of suitable waste rather than virgin raw material or material that has ceased to be waste, such as treated contaminated soil. There are various rules and requirements that should be followed and for more information on this see Government guidance:

[Guidance on U1 waste-exemption for the use of waste in construction](#)

This can be used for lower volumes up to 1,000t of soil and 5,000t of aggregates. However for larger volumes of soil it will be necessary to apply the [CL:AiRE DoWCoP](#) (Definition of Waste: Code of Practice).

DoWCoP is a recognised procedure that enables the reuse of excavated soil (including both contaminated/uncontaminated materials) on-site or their movement between sites. DoWCoP is applied where it can be demonstrated that there is a certainty of use at the receiving site (such as a planning permission for a site feature that requires the soil). This is discussed in the next section.

Reuse of material within larger development in particular may result in fewer lorry journeys to/from the site and thus in lower carbon emissions, helping to minimise contributions to climate change.



FIGURE 5 Rotary drilling of borehole within waste materials

11. Other permissions that may be required

11.1 Consents and licences

There are a range of consents that may be required before development can occur, from listed building consents to protected species licences. This guidance applies to the assessment and remediation of contaminated and potentially contaminated sites that are being considered under the planning process and this section provides an outline of those requirements.

Sometimes investigation and remediation activities require permits or consents from the Environment Agency or additional planning permission from the Local Planning Authority. Consents from the Environment Agency might relate to specialist plant for the treatment of soil and groundwater, abstraction and disposal of groundwater and management of wastes. Consent may be required from the local water/sewerage company to receive wastewater arisings.

Building regulations approval may also be required and the applicant must ensure that the Building Control Inspector is aware of contamination issues and that the appropriate requirements are met. It may be necessary for the developer to provide evidence of any measures that were incorporated into the development to protect it from contamination. For example, such measures could include protection from soil gas ingress, and these may need to be checked and approved by the building control body before any remediation can be deemed complete and before discharge of any conditions will be considered.

11.2 Regulation of wastes:

All developments generate wastes. As well as general construction and office waste, some developments have a surfeit or deficit of soil arising from the construction process. Soil in those circumstances is a waste material.

If using, treating, storing or disposing waste soil then you need either:

- an 'environmental permit' or;
- an 'exemption' (permission for a waste operation that is exempt from needing an environmental permit, if the material falls within the criteria/limits)

Where that soil is surplus to requirements it can in some circumstances be passed to other developments to use. Soils that are required for a particular development can be brought to site under a DoWCoP arrangement (as noted in the previous section).

To be able to demonstrate that material is not waste within a development, it is necessary to demonstrate that the material:

- Is suitable for its intended use – doesn't pose a risk to human health or the environment
- Has certainty of use – the material was always intended to be used from the planning and design stage
- Has certainty of volume – the defined amount and no more being used
- Has been manufactured in accord with the WRAP protocol – demonstrating the material is no longer waste.

12. References

Overview

- [Guidance for the Safe Development of Housing on Land Affected by Contamination, NHBC/EA/CIEH, R&D Publication 66: 2008](#)
- [Environment Agency guidance 'Land contamination risk management' \(LCRM\) 2020](#)

Detailed information about site assessment will be found in these BSI publications:

- BS 10175: [Investigation of potentially contaminated sites – code of practice](#)
- BS 5930: [Code of practice for ground investigations](#)
- BS EN ISO 21365: [Soil quality - conceptual site models for potentially contaminated sites](#)
- BS 8576: [Guidance on investigations for ground gas – permanent gases and volatile organic compounds](#)

Procedures for verifying installation of gas protection measures:

- BS 8485: [Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings](#)
- CIRIA 735, Good practice on the testing and verification of protection systems for buildings against hazardous ground gases, CIRIA, 2014



Appendix 1 Swindon Borough Council Planning Policy

The relevant current Swindon Borough Local Plan (2026) policies, as applicable to pollution, are:

Policy EN7: Pollution

a. Development that is likely to lead to emissions of pollutants such as noise, light, vibration, smell, fumes, smoke, soot, ash, dust, grit or toxic substances that may adversely affect existing development and vulnerable wildlife habitats, shall only be permitted where such emissions are controlled to a point where there is no significant loss of amenity for existing land uses, or habitats.

b. Similarly; where development would be adversely affected by the emission of pollutants from an existing use; the proposal will only be permitted where the users of the future development are protected from loss of amenity from those emissions in accord with Policy DE1.

Policy EN8: Unstable Land

a. Development of land that is either known to be unstable, or is strongly suspected of instability, shall only be permitted when:

- an evaluation has been submitted of the level and precise nature of any instability; and
- there are no significant adverse effects on adjacent sites; and the extent of remedial measure required to achieve a level of land stability suitable for the proposed use, capable of supporting future development loads has been identified.

b. Where planning permission is granted, conditions may be imposed requiring the execution of any necessary remedial works.

c. Where a site is affected by land stability issues responsibility for securing a safe development rests with the developer and/or landowner, who will be required to carry out the above.

Policy EN9: Contaminated Land

a. Development of land that is either contaminated, or is strongly suspected of being contaminated, shall only be permitted when:

- an evaluation has been submitted of the level and precise nature of any contamination and need for removal or treatment; and
- the potential of existing contaminants to pollute both surface water and ground water, both during and after construction has been established; and
- the decontamination measures required to achieve a level of land quality suitable for the proposed end use have been identified; and
- measures are taken to ensure that migrating gas is safely dealt with where development is proposed on land adjacent to an uncontrolled 'gassing' landfill site.

b. Where planning permission is granted, conditions may be imposed requiring the execution of any necessary remedial works.

c. Where a site is affected by land contamination responsibility for securing a safe development rests with the developer and/or landowner, who will be required to carry out the above.

Particularly Relevant Sections of the Local Plan 2026

4.372 It is the responsibility of the prospective developer to investigate the existence and extent of any contamination and to assess the viability of development in economic terms.

4.373 In considering proposals for development, the Local Planning Authority should take account of the risks of and from land contamination and how these can be managed or reduced. As a consequence, the Local Planning Authority may, when granting planning permission on a site which may potentially be contaminated impose:

- Conditions requiring the developer to first investigate and assess the extent of contamination, and
- Where necessary, require that remedial action be taken to neutralise the hazard prior to development commencing.

4.374 Development proposals which are adjacent to an uncontrolled 'gassing' landfill site will require the developer to demonstrate to the Local Planning Authority that adequate precaution has been taken to ensure that any gas leaking into the development site will be trapped and safely vented away.