

INTRODUCTION

The Contaminated Land (Scotland) Regulations 2000 places a duty on Local Authorities to draft a strategy in order to manage contaminated land¹ within their area. This includes the inspection and where necessary the remediation of land found to be statutorily contaminated.

The strategy recognises that the Development Management function within the planning system is the main mechanism by which land contamination will be managed. To be able to approve planning permission for a development on a brownfield site², the Planning Authority will require the assurances that the procedures indicated in this Planning Advice Note will deliver regarding potential contamination.

APPLICATION

Where a development site has been previously built upon or used for other development purposes, it could constitute a brownfield site. All brownfield sites have the potential to have been contaminated but clearly there are varying degrees of contamination. Therefore, it is the intention of the Planning Authority to vary its approach and requirements dependant upon the suspected or better still, known degree of contamination.

- In circumstances where contamination is virtually inevitable e.g. where the development site constitutes an old gas producing works, where ground is upfilled with domestic waste, or where it has previously been occupied by an industrial activity that utilised hazardous materials or processes etc, information regarding contamination will be required before a planning application can be determined. It is recommended that a comprehensive contaminated land investigation report which details the investigations carried out to determine the suitability of the development site for its proposed use, accompany the planning application. The submission of this information will avoid an unnecessary delay during the determination process of the planning application.
- Where some, but probably a lesser degree of contamination may be suspected of being present, planning permission may be approved subject to the attachment of a suspensive condition. The purpose of a suspensive

¹ Contaminated land: Any land which appears to the Local Authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that significant harm is being caused or there is a significant possibility of such harm being caused; or significant pollution of the water environment is being caused or there is a significant possibility of such pollution being caused.

² Brownfield site: Land which has previously been developed. The term may cover vacant or derelict land, land occupied by redundant or unused building and development land within the development boundary where further intensification of use is considered acceptable.

condition is to prevent the planning permission being implemented until the Planning Authority is satisfied that there is no contamination or that acceptable remedial measures will be undertaken. Examples are outlined below:

1. *That, prior to commencement of any development works, a comprehensive contaminated land investigation report shall be submitted for the written approval of the Planning Authority. The investigation shall be completed in accordance with a recognised code of practice such as The British Standards Institution "The Investigation of Potentially Contaminated Sites – Code of Practice" (BS 10175: 2011). The report must include a site-specific risk assessment of all relevant pollutant linkages, as required in Scottish Government Planning Advice Note 33 – Development of Contaminated Land.*
 2. *That where the contaminated land investigation report identifies any unacceptable risk or risks as defined under Part IIA of the Environmental Protection Act 1990, a detailed remediation strategy shall be submitted for the written approval of the Planning Authority. No works, other than investigative, demolition or site clearance works shall be carried out on the development site prior to the remediation strategy being approved by the Planning Authority. Prior to the occupation of the development the remediation strategy, which shall be fully implemented and a validation report confirming that all necessary remediation works have been undertaken, shall be submitted for the written approval of the Planning Authority.*
- Some developments on brownfield sites e.g. ground known to have previously accommodated only residential development, will require the submission of historical information indicating the previous land uses. This information should be submitted in support of the planning application in order to avoid an unnecessary delay during the determination process. The historical information could also avoid the requirement to attach a suspensive condition in the approval of any planning permission, which would require the satisfactory provision of such information prior to the commencement of any development works.

The comprehensive contaminated land investigation report should consist of a stage 1: desktop study which will evaluate the development site in order to determine whether or not a further intrusive stage 2: site assessment is necessary. Where a further intrusive stage 2: site assessment is necessary and contamination is confirmed, then a stage 3: remediation options would also be required.

Please note that the planning application form asks for the previous use of the land to be stated. If the land or building(s) are vacant, every effort should be made to ascertain what the previous land uses were.

INFORMATION REQUIREMENTS

It is recommended that applicants engage the services of a suitably qualified professional to undertake a stage 1: desktop study. It is essential that applicants engage the services of a suitably qualified professional to undertake a stage 2: site assessment and a stage 3: remediation options if they are required.

Stage 1: Desktop Study

The aim of this stage is as follows:

- To collate historical information (especially regarding previous land uses) relating to the development site in order to obtain a clear picture of the potential nature of any contamination which may be present on the development site. The historical information can be obtained from old maps, title deeds, an archivist and old almanacs etc.
- To identify any operational or historical waste disposal sites within proximity of the development site.
- To consult and thereafter collate any information obtained from statutory and unitary authorities.
- To collate technical data gained from previous site investigations.
- To collate anecdotal or other sources of information.

Site Walkover

A critical walkover survey of the development site should be carried out to establish any evidence of environmental concerns. Development site conditions should be assessed and obvious visual signs of contamination should be noted and photographed e.g. any solids, liquids or gases etc on the surface, or any unusual odours.

Adjacent or neighbouring activities should be noted for their importance in terms of potential environmental impact on the development site.

If the development site is operational, notes should be taken regarding environmental practices such as storage and handling of waste materials; authorisations associated with the development site; evidence of storage areas; and any aboveground and/or underground tanks.

Where buildings are present within the development site, their current and former use(s) should be identified as far as possible. An assessment should also be made of any environmental contamination issues that would need to be considered in the event of the building being demolished.

Site Assessment

It is important to identify any receptors³ which may be at risk from any potential hazards. Consideration should be given to any potential pathway e.g. drains, groundwater, surface water and underground pipes etc which would allow the receptor to be exposed to the potential hazard. Information indicating the linkage of source to pathway to receptor should be provided.

Report Contents

In addition to the stage 1: desktop study, the report should also include details of the risk assessment (including conceptual model) discussion and recommendation, and references i.e. documents consulted etc.

Stage 2: Site Assessment

This is required where a stage 1: desktop study indicates that the development site is potentially contaminated and the degree and nature of the contamination needs further clarification.

The aim of a stage 2: site assessment is to collect the data in order to support the following:

- Any reassessment of pollutant linkages;
- An assessment of the degree of significance or harm in the likely risk;
- Any recommendations for any remedial measures; and
- An identification of constraints on the land use.

Site Investigation Survey

The nature of work required will vary from development site to development site and in some cases across the same development site, but could include soil, groundwater or other sampling as determined by the stage 1: desktop study investigation findings. The level of investigation should allow enough data to be collected to enable a site specific assessment to be made and for there to be confidence in the results.

The design of the investigation programme should consider the methods of excavation, numbers of sampling points and analytical suites.

Analysis and Monitoring

Details of the on-site testing should be provided along with the following:

- The rationale behind the number of samples chosen and their locations;

³ *Receptors: Most commonly and most importantly means humans but can also include ecosystems, property and controlled waters etc.*

- The methods regarding sampling, storage and transportation of samples;
- The analytical methods used including the number of samples analysed and the method of detection limits etc;
- The name of the development site investigation companies and the testing laboratories which must be accredited; and
- Any other details which are considered appropriate.

Report Contents

In addition to providing the information above, the report should expand upon the information gained from the initial stage 1: desktop study in order to detail the reasons for undertaking the development site investigation. On the basis of the data collected a risk evaluation should be conducted. This will identify contaminant sources, pathways and receptors from which an assessment of their connectivity can be carried out and will evaluate the risks to human health, surface and groundwater and to the wider environment. The discussion and recommendations should be based on the findings of the risk assessment.

Stage 3: Remediation Options

The level of this report will depend upon the complexity of the problems associated with the development site and the number of options being considered. All stages of the assessment process should be clearly documented in order to demonstrate the selection criteria used and to justify the decisions made.

The report should include the objectives of the remediation, the development site constraints, the screening of options, the assessment methodology, the assessment of options and the conclusions.

FURTHER GUIDANCE

Environmental Protection Act 1990: Part IIA Contaminated Land – Statutory Guidance: Edition 2 (May 2006)

Scottish Government Planning Advice Note 33 – Development of Contaminated Land

The British Standards Institution “The Investigation of Potentially Contaminated Sites – Code of Practice” (BS 10175:2011)