

Recommended Guidance

The 'Advice Note' on Breckland Council's Contaminated Land web page at <http://www.breckland.gov.uk/contaminatedland>

BS 10175:2001 - Investigation of Contaminated Land - Code of Practice (BSI), ISBN 0580330907

C552:2001 - Contaminated Land Risk Assessment: A Guide to Good Practice (www.ciria.org)

Department of the Environment Industry Profiles (www.environment-agency.gov.uk)

Guidance on Evaluation of Development Proposals on Sites where Methane and Carbon Dioxide are Present, Report Edition No. 04 March 2007 (www.nhbc.co.uk)

Guidance for the Safe Development of Housing on Land Affected by Contamination, R&D66, 2008 (EA/NHBC/CIEH, 2008). (www.nhbc.co.uk)

Land Contamination Reports: Advice for Consultants and Developers (advice of a more technical nature aimed at your consultant) (<http://www.breckland.gov.uk/contaminatedland>)

Landfills - information on location (www.environment-agency.gov.uk)

CLR11 - Model Procedures for the Management of Land Contamination, Environment Agency, September 2004 (www.environment-agency.gov.uk)

Planning Policy Statement 23: Planning and Pollution Control (PPS23) and accompanying Annex 2: Development of Land affected by Contamination (www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpolicystatements/planningpolicystatements/pps23/)

Quarries - information on location (www.historic-maps.norfolk.gov.uk/Emap/EmapExplorer.asp)



1.0 The aim of this document

- 1.1 The purpose of this document is to advise developers of what type of information is required by the Local Planning Authority for sites where land contamination could possibly affect a proposed development. This relates not only to sites where the presence of contamination is suspected but also for sites where the proposed end use would be particularly vulnerable to contamination such as residential, allotments, schools (whether contamination is suspected or not).
- 1.2 Providing the necessary information to the LPA will enable an informed decision to be made both at the application stage and during development, helping to prevent costly delays in the planning process.
- 1.3 Please be aware that each site is assessed according to its specific circumstances and therefore this document is by no means exhaustive. It is advisable to contact the council's Contaminated Land Officer(s) to discuss specific development issues prior to submitting a planning application.

2.0 Introduction

- 2.1 Planning legislation 'The Town and Country Planning Act 1990' recognises that land potentially affected by contamination is a material planning consideration, and that the development stage is the most cost-effective time to assess and deal with the potential risks. The aim is to produce a safe development in order that the site cannot be determined as contaminated in the future under Part 2A of the Environmental Protection Act 1990.
- 2.2 Under planning legislation the developer has a responsibility to ensure that the development is safe and suitable for the proposed end use. In order to do this the developer must inform the planner of any potential contamination issues, produce a risk assessment to qualify the potential risks and show how they can be dealt with effectively.

Example contaminative uses and activities (cont'd)

- Agriculture - excessive use or spills of pesticides, herbicides, fungicides, sewage sludge and farm waste disposal
- Naturally-occurring metals
- CO2 and CH4 production and emissions in coal mining areas, wetlands, peat moors or former wetlands
- Spraying of herbicides and pesticides
- Unregulated tipping activities
- Domestic heating oil leaks
- Railway Land (other than described in high risk category)
- Made ground
- Cottage industry
- Burial sites and graveyards
- Garages used for car parking

Annex 1 - Table 2 Desk Study Checklist

| | |
|-----------------------|---|
| Site Summary | Report Aim Executive Summary Signed, dated and checked |
| Description | Site location maps Site layout plans Site area |
| Historic Land Use | Historic Maps Person of longstanding association Business/commercial uses |
| Current Land Use | Planning Landfill Local information Regulatory bodies Property/business Environmental site survey/review |
| Neighbouring Land Use | Present land use Past land use |
| Environmental Setting | Hydrology/geology Aquifer/source protection zone Surface water courses SSSI/other |
| Walkover | Site photographs Aerial photographs Ground conditions |
| Conceptual Site Model | Source(s) Pathway(s) Receptor(s) |

Annex 1 - Table 1 - Potentially contaminative uses

Example contaminative uses and activities

- Smelters, foundries, steel works, metal processing and finishing works
- Coal, mineral mining and processing, both deep mines and opencast
- Heavy engineering & engineering works, e.g. car manufacture
- Military/defence related activities
- Electrical and electronic equipment manufacture and repair
- Gasworks, coal carbonisation plants, power stations
- Oil refineries, petroleum storage and distribution sites
- Manufacture and use of asbestos, cement, lime and gypsum
- Manufacture of organic and inorganic chemicals, including pesticides, acids/alkalis, pharmaceuticals, solvents, paints etc
- Rubber industry, including tyre manufacture
- Munitions/explosives production, testing and storage sites
- Glass making and ceramics manufacture
- Textile industry, including tanning and dyestuffs
- Paper and pulp manufacture, printing works and photographic processing
- Timber treatment
- Food processing industry and catering establishments
- Railway depots, dockyards, garages, road haulage depots, airports
- Landfill, storage and incineration of waste
- Sewage works, farms and treatment plants
- Scrap yards and breakers yards
- All types of laboratories
- Power stations, electricity substations, gas works
- Chemical and manufacturing plants - using/storing bulk liquid chemicals or discharging of effluent
- Quarries or land which has been infilled with unknown fill.
- Collieries
- Ministry of Defence sites
- Fuel storage facilities, garages and petrol forecourts
- Abandoned mines and downstream of such mines if in a flood zone
- Abattoirs, animal waste processing and burial of diseased livestock
- Other industries and commercial uses not listed in DoE profiles
- Engineering works
- Urban soils (which are comprised of made ground)
- Land with known fill
- Land which has been bombed
- Hospitals
- All works employing metal finishing processes - plating, paint spraying
- Vehicle repair garages (no oil storage)
- Works utilising animal products, for example, tanneries
- Radioactive substances used in industrial activities e.g. gas mantle production, luminising works, dial manufacturers
- Dry cleaning premises

- 2.3 Further guidance on the developer's responsibilities and how to meet them can be found in Planning Policy Statement 23: Planning and Pollution Control (PPS23) and accompanying Annex 2 "Development of Land Affected by Contamination" (see Recommended Guidance).

3.0 Phases of Land Contamination Assessment

- 3.1 The Local Planning Authority has a duty to ensure that the developer carries out the necessary risk assessment and, where applicable, a suitable remediation (clean-up) strategy so that contamination is dealt with successfully. Under the national planning system (IAPP) when contamination issues exist, a Desk Study (and in some cases a Site Investigation) is likely to be required at the time of submitting the application before the application can be accepted (validated). If any further stages of risk assessment/remediation are subsequently required, these will be dealt with by the LPA attaching conditions to the planning permission. There are several phases to a risk assessment which are mirrored by the conditions attached to the planning permission:

Phase 1: **Desk Study** - (usually submitted at the application stage) - which needs to include a detailed 'site walkover' and a model of how potential contaminants might reach the receptor(s) e.g. human beings, groundwater. These are called 'pollutant linkages'. It is essential to identify them before proceeding to Phase 2, Site Investigation.

Phase 2: **Site investigation and Risk Assessment** - involving taking on-site samples for testing, the design of which must be based on 'the pollutant linkages' identified above

Phase 3: **Remediation Scheme** - method of how contamination identified in the site investigation will be cleaned-up

Phase 4: **Verification/Validation** - proof that 'Implementation of the Approved Remediation Scheme' was successful and that the site is suitable for the proposed use.

4.0 Submitting an application

4.1 Standard 1 APP Form

4.1.1 At the application stage, the risk associated with the proposed use must be considered along with the risk associated with the previous use. Development often introduces vulnerable receptors such as future residents. The Existing Use section (normally section 15) requires the applicant to identify if there is a potential for land contamination or if the proposed use would be particularly vulnerable.

15. Existing Use

Please describe the current use of the site:

Is the site currently vacant? Yes No

If Yes, please describe the last use of the site:

When did this use end (if known)? DD/MM/YYYY (date where known may be approximate)

Does the proposal involve any of the following:

Land which is known to be contaminated? Yes No

Land where contamination is suspected for all or part of the site? Yes No

A proposed use that would be particularly vulnerable to the presence of contamination? Yes No

If you have answered Yes to any of the above, you will need to submit an appropriate contamination assessment.

e.g. site with contamination from past industrial use or a site on a landfill or filled quarry (Box 1)

e.g. site previously developed or adjacent to land with potential contamination, or in the vicinity of a landfill or filled quarry (Box 1)

Contamination is not restricted to land with previous industrial use. It can occur on greenfield sites - a list of potentially vulnerable uses is shown in Box 2.

4.1.2 The aim of the 'Existing Use questions' are to help the developer identify what level of information is required to support the planning application. The following section explains what is required in more detail.

4.1.3 Sufficient information is required for any sites which have/or have had a use which may have given rise to contamination to adequately prove to the LPA that the development can proceed safely.

before proceeding to the next phase. Please contact your Planning Officer with regards to any charges which may be imposed.

Question What are the timescales and costs involved in land contamination assessment?

Answer It is important that the potential timescales and costs of this work are considered from the start. For a site requiring remediation it may be necessary to allow a sufficient time period (possibly up to a year) for all of the work to take place. The cost can vary significantly and with all significant purchases you are advised to seek a number of quotations.

Question When can I start building?

Answer Your condition starts with 'prior to commencement of development' and the start of construction works should not take place until the condition has been discharged. An application to discharge can be made once either an approved contaminated land assessment shows there is no contamination, or any remediation has been verified to the approval of the LPA.

Question How do I find a consultant?

Answer The Council does not recommend specific consultants. A good place to start would be personal recommendation or by searching trade directories/Yellow Pages under 'Site Investigation' or 'Environmental Consultants' in East Anglia. We recommend that you carefully consider quotations on merit as well as cost.

Question What is involved when filling in the questionnaires?

Answer The questionnaires do not have to be long reports; a short paragraph is fine if it provides a full answer. The questionnaires are used for a number of different proposed end uses, so it may be the case that not all the questions are relevant to the particular end use of your site. We do require photographs, a site plan showing existing and former uses and historic maps. Please make sure the questionnaire is signed by the person completing it.

Key points

- Extra costs and delays can be avoided by identifying potential contamination early and submitting the correct information.
- Consultation with us is welcomed at any stage. If you give us full information, this helps to prevent delays.
- Get specialist advice.
- A comprehensive Desk Study is crucial to an appropriate risk assessment.
- Current best practice should be followed at all times. BS10175 gives the Code of Practice for investigation of potentially contaminated sites (see Recommended Guidance).

Frequently asked questions

Question Why have I got to submit information/reports with my planning application before it is validated?

Answer Under PPS23 (Annex 2 S2.44) sufficient evidence needs to be provided by the developer to assess whether contamination is present and, if so, that there is a viable remedial solution to enable the LPA to grant the planning permission.

Question Why do I have to do a vulnerable development questionnaire/ desk study for a housing development if there is no obvious past use to suggest a source of contamination?

Answer Under PPS23 (Annex 2 S2.40) the potential for contamination should always be considered, regardless of past land use when the development is for a particularly vulnerable end use such as residential .

Question What do I need to do to discharge a land contamination condition?

Answer Land contamination assessment is addressed in a phased manner. The results of each phase will inform whether all phases are required. Please wait for approval by the LPA

5.0 Advice Note

Box 1

Q.1 Land which is known to be or suspected to be contaminated?
*If **yes** submit the following information otherwise proceed to Q.2*

| Type of development | Submit with 1 APP |
|---|--|
| New build (adjacent to former quarry, landfill, former garage, gas works) | Desk Study (& Site Investigation if appropriate) |
| Site with previous agricultural use | Agricultural Questionnaire* |

**An agricultural questionnaire is a starting point to identify whether a more formal desk study is required. A copy can be downloaded from <http://www.breckland.gov.uk/contaminatedland>.*

For the kinds of past use to be considered which may give rise to contamination please refer to Annex 1, Table 1. More information on past use is provided in the Department of Environment Industry Profiles and Table 2.1 of PPS23 Annex 2 (see Recommended Guidance). Any other relevant industrial/commercial land use should also be considered.

If it is obvious that contamination will be present on the site, such as on a former petrol filling station, gas works, landfill/filled quarry or the site was acquired with previous knowledge of contamination, a site investigation will also need to be submitted before the application can be registered/validated. The aim of this is to provide enough information to prove that the proposed development is viable. Without this the LPA will not be able to grant planning permission.

In addition, the past/present use of land in the vicinity also needs to be considered, such as land with fuel storage (within close proximity) and filled land (e.g. landfills and former quarries within 250 metres of the site) from which potential ground gas migration can occur. See Recommended Guidance for links to sources of information.



Box 2

Q.2 Is the proposed use particularly vulnerable?

| Type of development | Submit with 1APP |
|--|---------------------------------------|
| Residential development over 10 houses | Desk Study |
| Nursing Home | Desk Study |
| Residential development up to 10 houses | Vulnerable development questionnaire* |
| Garden | Vulnerable development questionnaire* |
| School | Vulnerable development questionnaire* |
| Nursery or Crèche | Vulnerable development questionnaire* |
| Play area | Vulnerable development questionnaire* |
| Allotments | Vulnerable development questionnaire* |
| Mixed use developments including sensitive end use | Vulnerable development questionnaire* |
| Hospitals | Vulnerable development questionnaire* |

**A vulnerable questionnaire is a starting point to identify whether a more formal desk study is required. A copy can be downloaded from <http://www.breckland.gov.uk/contaminatedland>.*

Please note that a homebuyer's report is not acceptable as a Desk Study. A Desk Study needs to include **a site walkover** and details of **the potential pollutant linkages** in relation to the proposed future use of the site. The Desk Study should comply with the criteria in the Council's checklist (Annex 1, Table 2).

6.0 Planning Permission

- 6.1 Submission of the relevant information above will inform the LPA on whether a contaminated land condition requiring specific works or further investigation/risk assessment needs to be attached to the planning permission.
- 6.2 Should a contaminated land condition be attached to the planning permission, the risk assessment will need to follow the phases outlined in section 3.1 and shown in Diagram 1. To allow

discharge of the contaminated land condition, the risk assessment must follow these phases. For specific charges relating to discharge we recommend contacting the planning officer.

Please make sure your reports are complete and wait for written approval from the LPA at each phase before continuing.

Diagram 1

