

Development of Contaminated Land

Introduction

Selby District is primarily a rural area that is characterised by open, sparsely wooded arable landscapes of generally high quality farmland. However the presence of industrial activities has still left a legacy of potentially contaminated land throughout the district. The purpose of this guide is to make developers aware of what information the Council may require in order to assess a planning application on land that might be affected by the presence of contamination. Government guidance recognises that land potentially affected by contamination is a material planning consideration and that the development phase is the most cost effective time to deal with the problem.

Planning legislation and guidance places the responsibility on the owners and developers to establish the extent of any potentially harmful materials on their sites. When submitting planning applications it is the applicants responsibility to provide information on whether the site is contaminated. The council under the planning process has a responsibility to ensure that any issues relating to potential contamination are addressed prior to the redevelopment of any site within the district in a responsible and effective manner.

The Councils Approach

When an application for planning permission is made the applicant is required to provide the local planning authority with relevant details of the history of the application site. This information should include a list of existing and all previous land uses that are associated with the application site dating back to 1800.

Where the application in question relates to:

1. A site that is considered to have the potential to be contaminated, or
2. A development area greater than 250 square metres, or
3. Includes the creation of 4 or more residential properties,

You will be asked to submit a comprehensive desk study report so as to provide sufficient information to identify any risks that may exist from the site or adjacent sites in relation to the intended use of the site to make it 'suitable for use'. This study

should also identify any risks in relation to any harm that might be caused to other receptors either on or adjacent to the site.

Please note that due to the complex and technical nature of this issue we would strongly suggest that a suitably qualified consultant be appointed to ensure that all of these obligations are correctly met and adhered to. This will enable the applicant and the local planning authority to determine the need, if any, for a site investigation. The scope of the submitted report must reflect the size and complexity of the application site, necessary level of investigation as well as likely contamination risks.

Guidance

To aid in the swift processing of planning applications for potentially contaminated sites, the following guidance on the content of supporting reports is provided. The attached checklist is a guide to the matters which will need addressing depending on the sites previous uses and the extent of the potential / actual contamination present. If any of the items listed in the checklist are not submitted in the reports then a full explanation should be included as to their omission. The list is not exhaustive and as such the contents of any site reports will vary due to site specific issues e.g. the past use of the site, the nature and extent of the contamination and the proposed end use of the site. A list of key reference documents has also been prepared, this list is not exhaustive or exclusive, but it indicates the more relevant guidance and information available.

The requirements listed will enable the planning officers to make an informed decision on the suitability of the proposed development and remediation scheme if necessary. The investigation can be split into four phases, although not every site will require each phase to be carried out. The phases identified may be submitted as individual reports or as one combined report. A failure to include at least this level of information may result in requests for further information and subsequently significant delays in the processing of your application.



Checklist for Reports Submitted in Support of Planning Applications

A. Desk Study – Phase 1 Report

1. Clearly defined purpose and aims of study
2. Site location and layout plans
3. Appraisal of site history, identifying all uses of the site / vicinity back until the site was greenfield
4. Assessment of environmental setting, to include:
 - Geology, hydrogeology, hydrology
 - Information on coal workings (if appropriate)
 - Information from Environment Agency on abstractions, pollution incidents, water quality classification, landfill sites within 250m etc.
 - Information from English Nature on SSSIs and other interests that warrant protection
 - Information from public authorities
5. Assessment of current / proposed site use and surrounding land uses
6. Review of any previous site contamination studies (desk based or intrusive) or remediation works, whether undertaken on the site or on any adjacent site
7. Preliminary (qualitative) assessment of risks, to include:
 - Appraisal of potential contaminant sources, pathways and receptors
 - Conceptual site model
 - Health and safety issues
8. Recommendations for intrusive contamination investigation, if necessary

B. Site Investigation – Phase 2 Report

1. Review of any previous site contamination studies (desk based or intrusive) or remediation works
2. Clearly defined purpose and aims of study
3. Site investigation methodology, to include:
 - Methods of investigation including a fully justified sampling strategy and explanations of all investigation methods and techniques used
 - Plan showing exploration locations – to be appropriately scaled and

- annotated
 - Justification of exploration locations
 - Sampling and analytical strategies
4. Results and findings of investigation, to include
 - Ground conditions (soil and groundwater regimes, including made ground) and the implications for contamination
 - Discussion of soil / groundwater / surface water contamination (visual, olfactory, analytical)
 5. Conceptual site model
 6. Risk assessment – based on contaminant source – pathway – receptor model. Should take account of severity of consequences (to groundwater, human health etc.) and likelihood of occurrence, both present and future. All details of the site-specific QRA models selected and justification for their selection must be stated. Please note all assessments must be made by competent and directly experienced assessors
 7. Review of conceptual site model and plausible pollutant linkages
 8. Recommendation for remediation – justification should relate to proposed site use, risk assessment findings, as well as technical and financial appraisal – should follow the ‘suitable for use’ approach
 9. Recommendations for further investigation (if deemed necessary)

C. Remediation Statements (submitted before remediation)

1. Clearly defined purpose and objectives of the remediation works
2. Detailed outline of the works to be carried out
 - Description of ground conditions (soil and groundwater)
 - Type, form and scale of contamination to be remediated
 - Remediation methodology
 - Site plans / drawings
 - Phasing of works and approximate timescales

3. Consents, agreements and licenses (discharge consents, waste management license etc.) o
4. Site management procedures to protect site neighbours, environment and amenity during works, should include where appropriate
 - Health and safety procedures o
 - Dust, noise and odour controls o
 - Control of surface run-off o
5. Details of how any necessary variations from the approved remediation statement arising during the course of works will be dealt with, including notification of the Council o
6. Details of how the works will be validated to ensure the remediation objectives have been met; should include details on
 - Sampling strategy o
 - Use of on-site observations, visual / olfactory evidence o
 - Chemical analysis o
 - Proposed clean up standards (i.e. Contaminant concentrations) o

D. Validation Report (submitted following remediation)

1. Include information as per C(1) to C(6) o
2. Details of who carried out the works o
3. Details of justification of any changes from original remediation statement o
4. Substantiating data – should include where appropriate
 - Post remediation sampling, laboratory and in situ test results o
 - Monitoring results for soil and groundwater contaminants and gases o
 - Summary plots and tables relating to clean up criteria o
 - Plans showing treatment areas and details of any differences from original remediation statement o
5. Confirmation that remediation objectives have been met o
6. Recommendations for future maintenance and long term monitoring of the site (if deemed necessary) o

Key Documents

1. British Standards Institution, 1999. *BS5930, Code of Practice for Site Investigation*
2. British Standards Institution, 2001. *BS10175:2001, Investigation of Potentially Contaminated Sites: Code of Practice*
3. Building Research Establishment, 1991. *BRE Report BR212. Construction of New Buildings on Gas Contaminated Land*
4. DEFRA, 2002. *CLR7: Assessment of Risks to Human Health from Land Contamination: An Overview of the Development of Soil Guideline Values and Related Research.*
5. DEFRA, 2002. *CLR8: Priority Contaminants for the Assessment of Land*
6. DEFRA, 2002. *CLR9: Contaminants in soils: Collation of Toxicological Data and Intake Values for Humans*
7. DEFRA, 2002. *CLR10: Contaminated Land Exposure Assessment Model (CLEA): Technical Basis and Algorithms*
8. Department of the Environment, 1992. *Waste Management Paper No. 27. Landfill Gas: A Technical Memorandum Providing Guidance on the Monitoring and Control of Landfill Gas*
9. Department of the Environment, 1994. *Planning Policy Guidance: Planning and Pollution Control (PPG 23)*
10. Department of the Environment, 1994. *CLR1: A framework for assessing the impact of contaminated land on groundwater and surface water*

11. Department of the Environment, 1994. *CLR2: Guidance on preliminary site inspection of contaminated land*
12. Department of the Environment, 1994. *CLR3: Documentary research on industrial sites*
13. Department of the Environment, 1994. *CLR4: Sampling strategies for contaminated land*
14. Department of the Environment, 1995. *Industry Profiles (Various Titles)*
15. DETR, 2000. *Circular 02/2000 Contaminated Land*
16. DETR, 2000. *Guidelines for Environmental Risk Assessment and Management*
17. Environment Agency, 2000. *Technical Report P5 – 065/TR. Technical Aspects of Site Investigation*
18. Environment Agency, 2000. *Technical Report P5 – 066/TR. Secondary Model Procedure for the Development of Appropriate Soil Sampling Strategies for Land Contamination*
19. Environment Agency & NHBC, 2000. *R & D Publication 66. Guidance for the Safe Development of Housing on Land Affected by Contamination*
20. Health & Safety Executive, 1991. *Protection of Workers and the General Public during the Development of Contaminated Land*
21. DEFRA, 2002. *Tox Reports*
22. DEFRA, 2002. *SGV Reports*

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