



**Reading Borough Council -
Environmental Protection**

Contaminated Land Strategy -

Version 2.1

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SUMMARY -

Under Part IIA of the Environmental Protection Act 1990, each local authority is required to inspect contaminated land within its area and, where appropriate, to maintain a public register of clean-up action taken. This Contaminated Land Strategy is a statutory requirement which specifies how Reading Borough Council will implement and manage its regime for the identification of contaminated land. The strategy has been written in accordance with the statutory guidance Defra Circular 1/2006 'Contaminated Land'; and will be updated as necessary should the guidance be reviewed.

The Council's Environmental Protection team is primarily responsible for implementing the strategy, and it will be carried out in conjunction with other Council departments, external agencies and other interested parties.

The main purpose of this strategy is to outline how the Council will identify areas of the borough where both contaminants and receptors are present, and determine the likelihood that significant harm or the pollution of controlled waters will be caused.

The main steps involved in carrying out the inspection strategy are:

1. To identify areas of land within the borough that may be contaminated, by reviewing historical land use, carrying out site investigations and undertaking risk assessments in order to identify priorities for further investigation of higher risk sites.
2. To formally designate contaminated land where appropriate;
3. To bring about the remediation of land so that it is "suitable for use" through voluntary remediation wherever possible, and by serving remediation notices;
4. To maintain a public register containing contaminated land information;
5. To review the possibly contaminated/previously investigated areas and the inspection strategy from time to time in light of new information; and
6. To provide the Environment Agency with local land contamination information.

A number of contaminated sites within Reading have already been successfully remediated via development through the planning process and through the Part IIA legislation. It is the aim of the strategy to continue to encourage the remediation, redevelopment and regeneration of contaminated sites to make the borough clean and sustainable for the people of Reading.

1. INTRODUCTION

1.1 Contaminated Land Regulations

Part IIA of the Environmental Protection Act came into force in April 2000, and placed a duty on all local authorities to deal with the substantial legacy of land that has been historically contaminated. Additional provisions are contained in the Contaminated Land (England) Regulations 2006 (which replaced earlier regulations).

Under the legislation, Reading Borough Council is required to develop a strategy for inspecting the land within its boundary to identify contaminated land, in order to achieve the following objectives:

Government Objectives for Implementing the
Contaminated Land Strategy -

1. Identify and remove unacceptable risks to human health and the environment
2. -Bring damaged land back into beneficial use
3. Ensure that the cost burdens faced by individuals, companies and society are proportionate, manageable and economically sustainable.

1.2 What is Contaminated Land?

The presence of measurable concentrations of contaminants within the ground does not automatically imply that a contamination problem exists. The legislation defines contaminated land by the likelihood of a linkage occurring between the contamination source and the receptor.

Contaminated Land is defined in the Environment Act 1995 and the Environmental Protection Act 1990 (Defra Circular 01/2006), as:

'Any land which appears to the local authority...to be in such a condition, by reasons 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*
- *pollution of controlled waters is being, or is likely to be caused.'*

The existence of land contamination presents many threats to sustainable development, including restrictions upon the use of land which then increases the pressure on greenfield areas, damage to wildlife, and the high cost of remediation.

1.3 Purpose of This Contaminated Land Strategy

This strategy has been prepared by the Environmental Protection (EP) team within the Council. It sets out how the Council intends to identify contaminated land within the borough and to remove the potential for significant harm to occur within the local environment. It is based on the need to ensure that the land is classified according to the actual or potential contamination risk, so that the most serious problems are identified first. The Council must ensure that resources can be concentrated in areas where contaminated land is most likely.

The Council has a duty to secure the remediation of contaminated land. The Government's intention is that any remediation required under the legislation ensures that the land is 'suitable for use'. This means that land should be made suitable for its current or proposed use rather than necessarily being restored to a pristine condition. This is considered to be the most sustainable option, and the Government proposes that taken together with tough action to prevent new contamination, it can bring about progressive improvements in the condition of the land we pass on to future generations.

1.4 Financial Considerations

The Council will endeavour to agree voluntary remediation by the appropriate person(s) who will carry out the remediation of the land. This is likely to be the original polluter (following the 'polluter pays' principal), or if they cannot be traced, then the landowner may be liable. The Council will assess the proposed actions in any remediation statement and then review the claimed remediation when carried out.

A person served with a remediation notice by the Council may appeal to the Secretary of State under section 78L of the EPA 1990 as amended by section 104 of the Clean Neighbourhoods and Environment Act 2005.

It is possible that there may be no appropriate person found to bear the costs of remediation or there may be hardship considerations. In this case the Council or the Environment Agency may need to carry out the remediation of an area of contaminated land to meet their statutory duties.

Costs can in some cases be recovered by a charging notice on the land or by obtaining funding from Defra. The Council may apply for funding via the Environment Agency Capital Projects Programme who administers the scheme on behalf of Defra; when carrying out remediation on land where the Council is responsible for the contamination, once the site has been designated.

Elected members will be informed at the earliest opportunity of any plans to designate an area of Council owned land, or where the Council is the appropriate person and may be liable for remediation costs.

2. -CHARACTERISTICS OF READING AND HOW THEY WILL BE TAKEN INTO ACCOUNT IN THE STRATEGY

2.1 Land Use

The land use in Reading currently comprises approximately:

- 50% residential housing
- 20% commerce
- 10% industrial
- 20% council owned property such as parks, ancient monuments, museums, churches and schools.

The industries historically present within Reading with the potential to have caused land contamination include: gasworks, railways, scrap yards, chemical works, metal finishers, paper and printing works, engineering works, defence establishments, petrol stations, landfills, sewage works and sewage sludge treatment works.

2.2 Geology

Geology is an important factor when assessing the risk from contaminants that may exist in the ground (e.g. when assessing how readily the contaminants may move within the rock). Such assessments will be undertaken on a site-specific basis using detailed geological information. In general:

- Reading is largely underlain by Upper Cretaceous Chalk with Lambeth Group and London Clay overlying it to the southeast of the borough, with a few localised areas to the north and west.
- Radon gas (a naturally occurring radioactive gas produced within some geological strata) has generally not been considered to pose a particular risk in Reading as less than 1% of homes in the area were above the radon action level. However the last British Geological Survey by the National Environment Research Council has produced an updated indicative atlas of Radon in England and Wales in November 2007. This has indicated an increase in risk of the presence of radon in Reading north of the Thames River (Action level 3-5). Protection measures for new buildings and significant extensions are dealt with via Building Regulations Approved Document C.

2.3 Hydrogeology

The hydrogeology of Reading is complex, due to the varying geology across the borough. The Upper Cretaceous Chalk, which underlies the whole of Reading, is classified as a 'Principal Aquifer' that is likely to be able to support large abstractions for public supply and other purposes, and it is therefore particularly important to protect it from contamination.

'Secondary Aquifers' are present across much of Reading overlying either the Chalk or the London Clay. These aquifers are important for local water supplies and in supplying base flow to rivers.

There are 23 boreholes which hold abstraction licences within the borough, one of which has been assigned a Source Protection Zone by the Environment Agency i.e. it is for public water supply. Protection zones 2 and 3 of two further boreholes encompass substantial parts of Reading, although the boreholes themselves are located outside the borough.

2.4 Hydrology

Reading is situated at the confluence of the River Kennet and the River Thames, with the Kennet and Avon Canal following the route of the Kennet. The River Loddon lies approximately 2.5 km to the east of the borough boundary. One abstraction licence is held to withdraw water from the Thames at Park Farm for irrigation, abstracting approximately 7,000 m³ per year.

2.5 Areas of Naturally Enriched Soils

West London soil, which is present in Reading, is known to have high levels of arsenic; therefore when high arsenic levels are found during land investigations, further analysis of the soil may be necessary in order to determine whether it is naturally-occurring arsenic.

2.6 Conservation Areas

Sensitive areas and properties within Reading which are likely to require special protection from contamination are:

2 'Scheduled Ancient Monuments' protected by the Ancient Monuments and Archaeological Areas Act (1979)

3 earthwork monuments protected by national legislation

13 conservation areas e.g. parts of the commercial centre of St. Mary's Butts/Castle Street, and former village centres at Horncastle and Caversham

4 sites of historic parks and gardens on the English Heritage Register

Wildlife heritage sites.

A number of buildings of special architectural or historic interest under Section 1 of the Planning (Listed Buildings and Conservation Areas) Act 1990.

Areas of general wildlife interest and existing green areas

3. AIMS AND OBJECTIVES OF THE CONTAMINATED LAND STRATEGY

The aim of this strategy is to identify contaminated land within Reading and to remove the potential for 'significant harm' to occur, in line with the following aims:

- 1 To protect human health
- 2 To protect controlled waters
- 3 To protect designated ecosystems
- 4 To prevent damage to property
- 5 To prevent any further contamination of land
- 6 To encourage voluntary remediation
- 7 To encourage the re-use of brownfield land

The overall objectives when implementing the strategy are as follows:

1. To ensure that the Council complies with and enforces Part IIA of EPA 1990;
2. -To prioritise and inspect land where site investigation work confirms that the definition of contaminated land is most likely to apply;
3. -To inspect the Council's land holdings to identify liability issues with land ownership;
4. -To maintain strong links with the Environment Agency;
5. -To ensure that Councillors and Council departments are made aware of the requirements of Part IIA and its potential for achieving improvement in the quality of land in Reading, and our achievements in remediation of brownfield sites;
6. -To ensure that redevelopment of contaminated sites in Reading is in line with local and national planning policies;
7. -To assist in assessing areas of derelict land in the borough and consider their potential for nature conservation/parkland uses or brownfield development;
8. -To utilise the Reading Borough Council website for dissemination of information about contaminated land to the public, business organisations and others;
9. -To develop a database to enable provision of information to internal and external customers;
10. To answer all Environmental Information Requests within 21 working days.

4. CONTAMINATED LAND INSPECTION PROGRAMME

4.1 - Collection of Existing Information on Contamination Sources and Receptors

4.1.1 Information Sources

A large quantity of data has been gathered on potential contamination sources, location of sensitive receptors, risk to controlled waters, and site investigation and remediation work. The following information sources have been utilised:

- Historic map searches in conjunction with government industrial profiles to identify land uses that may have left a legacy of contamination.
- Records of contamination investigations and remediation projects contained in the Council's Environmental Health department files.
- Historic planning files on microfiche or the planning database.
- Planning and building control records on remediation, foundation design, stabilisation works and importation of top-soil.
- Information on potentially sensitive receptors held by various Council departments, e.g.:
 - **Leisure** - allotments, public open space, schools, football pitches
 - **Housing** - Reading housing stock
 - **Education** - Schools and playing fields
 - **Valuation** - Council owned land
- Map on the Environment Agency website that identifies Source Protection Zones, which will be used to help protect groundwater extraction points within the Borough.

4.1.2 Gaps in Information

- There is limited information on Reading's 16 known historic landfills. Information required includes fill material, size and location of site, and operational dates. Additional records may be held in archive by the Environment Agency and this information will be gathered in due course.
- Some historic land-uses are described as unknown works, warehouses or stores. These sites may be classified as a higher risk because of the unknown factor.
- There have been a number of extractions (brickworks, potteries, gravel pits and chalk pits) within Reading. These sites are classified as a potential risk due to the possibility of infilling. There is little information available on what such sites were filled with or whether they were filled at all.

- The British Geographical Survey has captured a wealth of data that may assist with the identification of pathways, natural background information, and the categorisation of known areas of made ground. This data has not yet been sourced due to cost.
- Some sites have limited information on historic use and/or any remedial action taken.

4.2 Evaluation of information and prioritisation of sites for inspection

Information on receptors and potential contaminants will be cross-referenced to identify list of sites to be investigated further, based on the proximity of the potential contamination to the receptors.

This list of sites will then be prioritised for further inspection, using the risk rating score assigned by our contaminated land database Geoenviron. A risk score of between 0 and 91 is assigned to each potentially contaminated site, which is based on a combination of the following factors:

1. The former land use - and therefore the types of contaminants that may be present according to the industry profile, and the resulting potential risk to groundwater, human health, ecology, property and surface water.
2. The sensitivity of the current land use.
3. Other factors such as whether any land remediation has taken place at the site.

It is important to remember that most of the sites prioritised for further - inspection are likely to be found to be uncontaminated. -

4.3 Current Priorities for Further Investigation

Based on the above factors, and the information currently held by the Council, the current priorities in investigating land contamination are therefore:

- Continue to implement investigation and remediation projects where specific land contamination problems are known or likely to be present or where the current use is particularly sensitive.
- Assess the potential for harm to human health where potentially contaminated land lies beneath or adjacent to residential property.
- Assess the pollution of controlled waters where industrial or landfill sites lie in groundwater source protection zones, over aquifers or are likely to affect other types of controlled waters.

- Continue to assess landfill sites where residential, business or industrial uses are near to them.
- In the case of older re-developments, further inspection work may be necessary on sites where remediation has been undertaken to ensure the appropriate works were carried out and that sites are suitable for their current use.

4.4 Inspection Timetable

The timetable for the inspection of potentially contaminated land is shown in annex 4. This is an ongoing process, and specific areas of land will be at different stages of investigation and remediation as the strategy is implemented.

4.5 Identification of Sites Requiring Urgent Action

Sites that will be seen as requiring particularly urgent action are:

- Those identified as causing actual harm or water pollution. Investigations of controlled waters will be undertaken on a site-specific basis, in conjunction with the Environment Agency.
- Sites that are identified by the EA and passed to the Council for further action.
- Sites that are brought to the Council's attention due to complaints, or to health risk cluster information.
- Sites contaminated following a pollution incident, spill or natural disaster where the clean up responsibilities would fall to the Environmental Protection Team (see Annex 6).

5. DETAILED INSPECTION AND RISK ASSESSMENT OF PARTICULAR AREAS OF LAND

5.1 Information Review

Detailed site inspections will start as desk studies. There will already have been a review of information of the Council's records, however, further information will be gathered from and discussed with other bodies as appropriate, e.g. the land owner/occupier, the Environment Agency, and Natural England. Information is likely to include site observations, site investigation reports or risk assessment reports.

5.2 Site Visit

The site under study will be visited, and any imminent threats to controlled waters identified. Some surface samples may be taken and/or surface gas levels recorded (or from available monitoring points if present).

5.3 Site Investigation

If the evidence is inconclusive as to whether or not the land is contaminated land then more information will be obtained via a thorough site investigation. The Council will enter into discussions with the land owner/occupier and any other appropriate person, and will encourage them to carry out the investigation work. If this co-operation is not forthcoming the Council will consider carrying out the ground investigations itself, subject to funding and the perceived risk of any potential problem, in order to fulfil its statutory duty.

5.4 Risk Assessment

Detailed risk assessment work may be necessary in order to fully evaluate the risk from the contamination, to establish whether the land should be designated as contaminated and/or whether remediation is required.

The Council will utilise technical support from environmental consultants where appropriate. Advice from the Environment Agency and other bodies such as local conservation and wildlife groups, Natural England, FSA and Defra will be sought as appropriate.

5.5 Remediation of Contaminated Sites

The Council's approach to its regulatory duties for contaminated land will be to seek voluntary remediation action before taking enforcement action, in line with Government recommendations. This will mainly be through the planning

process, as remediation often occurs as part of redevelopment and regeneration proposals. The Council will assess any proposed remediation actions and then review the remediation when carried out.

If the remediation of contaminated land cannot be agreed and dealt with voluntarily, the Council will meet its duties under Part IIA by the designation of *contaminated land* and take further action in ensuring the remediation of the land, unless the site is one which is the responsibility of the Environment Agency.

Government funding will be obtained where appropriate although in the first instance the Council will attempt to identify an 'appropriate person' who would be responsible for funding the remediation. 'Appropriate person' is defined in the legislation and the statutory guidance and is either the polluter (class A person) or the landowner or occupier (class B person).

The contaminated land legislation only grants to the Council limited powers to deal with contaminated materials, and action can only be taken in cases where the land is found to be *contaminated land* as defined in the statutory guidance.

6. ASSESSMENT OF COUNCIL OWNED LAND

In dealing with Council owned land that may be contaminated, the Council will be both the enforcement authority and the landowner unless the land is designated a 'special site', in which case the EA will enforce the legislation. The Environmental Protection Team will keep a good working relationship with other Council Departments to ensure that the council fulfils its responsibilities as owner/ occupier of any potentially contaminated land.

Initial cross-referencing has been undertaken of potentially contaminated sites with land owned by the Council. This has shown that significant areas of council-owned land were former mineral extraction sites and therefore are potential landfills of unknown nature. There are also areas of land that the Council has owned in the past, where potentially contaminative activities such as waste disposal may have occurred. The Council is also a major owner of land that is classified as a receptor under Part IIA.

It is anticipated that site investigations will focus on the landfill sites and brickworks, followed by any industrial sites that the Council own or part own. The land will be reviewed in accordance with the proposed inspection programme in order to ascertain whether the Council is likely to be responsible for cleaning up any contamination present. In the same way as for non-Council owned sites, the extent of any investigation will be dictated by resources, which will be targeted at sites where there is proof of contamination or sites that are likely to be a problem.

7. CAPTURE AND STORAGE OF INFORMATION

7.1 Electronic Data Storage Systems

All information associated with historic land use, site investigation and remediation will be held on the Council's Geographical Information System (GIS) in conjunction with a contaminated land data management system (Geoenviron database).

The information currently stored on GIS includes: Council property, landfill areas, historical potentially contaminative uses, local nature sites, potential part IIA sites, hydrology and water source protection zones.

7.2 Use of Information by other Council Departments

Information from the Geoenviron database, which is held by the Environmental Protection team, will be made available to other Council Departments as and when they require it. Many Council departments such as Planning have access to the GIS system.

8.3 The Public Register

Under Section 78R of Part IIA, the Council is required to maintain a register of the 'contaminated land' within its administrative area. The register must include all regulatory action taken by the Council in respect of the remediation of contaminated land, and information about the condition of the land.

A list of named sites will be available on the Council's web site. The full detailed register will be held by the Environmental Protection team and will be accessible, on request, during normal office working hours (it is advisable to make an appointment prior to visiting the offices).

Information to be kept on the Public Register

- Remediation notices
- Remediation declarations
- Remediation statements
- Notification of claimed remediation
- Designation of special sites
- Site specific guidance from the EA
- Appeals against a remediation notice or a charging notice
- Convictions for offences
- Details of cases where 'contaminated land' has or is being dealt with under another regulatory regime

8. RESPONDING TO ENQUIRIES, COMPLAINTS AND INFORMATION REGARDING CONTAMINATED LAND

8.1 Responding to Environmental Information Requests

Requests for information on land contamination are frequently received from a range of people including developers, solicitors, environmental consultants, environmental groups and interested members of the public. In response, the Environmental Protection team carries out a search of the environmental data management system and GIS, and the planning and environmental health files, having regard to the requirements of the Environmental Information Regulations.

8.2 Responding to Information and Complaints

The Council receives information and complaints regarding contaminated land from members of the public, businesses and community groups. Such correspondence is logged in the Council's electronic complaints system and the enquirer is contacted by an officer.

Anecdotal information on land contamination is provided to the Council from time to time. Local residents may have extensive knowledge of historical sites such as landfills. Any such information will be noted on an appropriate file and on the database, and will be verified as appropriate.

9. -COMMUNICATION WITH OTHER AGENCIES AND INTERESTED PARTIES

The Environmental Protection team is the central contact point within the Council on contaminated land issues and as appropriate will liaise with the internal and external agencies and interested parties listed in Annex 3.

9.1 Communication with Internal Council Departments

The Environmental Protection team maintains contact with other departments involved in land contamination matters (Planning and Building Control). Departments managing land in the Council have also been consulted regarding this strategy and will be informed regarding amendments and Part IIA actions.

9.2 Communication with the Environment Agency

The Council will liaise with the EA in the following ways:

- Sharing of information via the local Berkshire contaminated land group.
- The Council must identify contaminated land that may be a special site, for which the EA is the enforcing authority.
- The EA will provide the Council with guidance to assist in its contaminated land duties.
- Provision of information to the EA for its national report on the state of contaminated land in England.

9.3 Communication with Other Interested Parties

When appropriate, the Council will consult with major landholders and developers in the borough. The Council will identify at the earliest possible stage whom to communicate with so that an early dialogue can be established. In addition, copies of the strategy will be kept at the Council Offices in the Civic Centre, and it will be available on the Council's website.

9.4 Risk Communication

Due to the complex nature of land contamination issues it is essential that the Council uses effective methods for risk communication, as the perception of risks will be different for the various interested parties. Discussions with the Council's marketing and PR team on appropriate methods of communicating information will be ongoing, and technical advice on risk communication will be utilised as appropriate. The Council will endeavour to provide a clear assessment of risk and will treat any concerns raised by a member of the public or others seriously.

10. REVIEW MECHANISMS

10.1 Re-inspecting Land

The legislation requires the Council to inspect its area from time to time for the purposes of identifying contaminated land. The Council may need to re-inspect land as a routine re-inspection or because of changes in information, such as:

- Changes in use of the land whereby new receptors could be introduced on potentially contaminated land e.g. a housing development, park, or nature reserve.
- Information being submitted from other statutory bodies, owners or occupiers of land.
- Reports of localised health effects that seem to relate to a particular area of land.

10.2 Review of Inspection Strategy

The Environmental Protection team will undertake regular reviews of assumptions made within this strategy document and about individual sites, and will review the progress made in implementing the strategy as part of the inspection programme. The review timescales will be affected by:

- Changes in the current legislation;
- Revision of guideline values for exposure assessment;
- Proposed redevelopment of the site and/or surrounding land;
- Natural disasters e.g. flooding, fires;
- Accidents on site e.g. spillages; or
- Complaints from the general public, businesses, voluntary organisations.

References -

1. The Environmental Protection Act 1990 and the Environment Act 1995; OPSI.
2. The Contaminated Land (England) Regulations 2006; OPSI.
3. Defra Circular 1/2006; 'Contaminated Land', September 2006, Defra.
4. Contaminated Land Inspection strategies, Technical Advice for Local Authorities, May 2001; OPSI.
5. Local Authority Guide to the Application of Part IIA of the Environmental Protection Act 1990, Environment Agency.
6. BGS Report Technical WE/99/14 & Environment Agency National Groundwater and Contaminated Land Centre Project NC/06/32
9. Communicating Understanding of Contaminated Land Risks, SNIFFER 1999.
10. Websites of Defra, the Environment Agency, Natural England.
11. Guidance on the Legal Definition of Contaminated Land, July 2008, Defra
12. Letter to Chief Planning Officers: Model planning conditions for development on land affected by contamination, Communities and Local Government, 30 May 2008.
13. Planning Policy Statement 23: Planning and Pollution Control, 3 November 2004

Annex 1: Potentially Contaminative Land Uses -

10.3 Examples of Potentially Contaminating Uses of Land and Situations where Land may be Affected by Contamination

PPS23: A wide range of industries may historically have contaminated, or have the potential to contaminate the land they are sited upon (and neighbouring land) - The DOE Industry Profiles give further details.

- Smelters, foundries, steel works, metal processing & finishing works
- Coal & mineral mining & processing, both deep mines and opencast
- Heavy engineering & engineering works, e.g. car manufacture, shipbuilding
- Military/defence related activities
- Electrical & electronic equipment manufacture & repair
- Gasworks, coal carbonisation plants, power stations
- Oil refineries, petroleum storage & distribution sites
- Manufacture & use of asbestos, cement, lime & gypsum
- Manufacture of organic & inorganic chemicals, including pesticides, acids/alkalis, pharmaceuticals, solvents, paints, detergents and cosmetics
- Rubber industry, including tyre manufacture
- Munitions & explosives production, testing & storage sites
- Glass making & ceramics manufacture
- Textile industry, including tanning & dyestuffs
- Paper & pulp manufacture, printing works & photographic processing
- Timber treatment
- Food processing industry & catering establishments
- Railway depots, dockyards (including filled dock basins), garages, road haulage depots, airports
- Landfill, storage & incineration of waste
- Sewage works, farms, stables & kennels
- Abattoirs, animal waste processing & burial of diseased livestock
- Scrap yards
- Dry cleaning premises
- All types of laboratories

10.4 Other uses & types of land that might be contaminated include:

- Radioactive substances used in industrial activities not mentioned above - e.g. gas mantle production, luminising works
- Burial sites & graveyards
- Agriculture - excessive use or spills of pesticides, herbicides, fungicides, sewage sludge & farm waste disposal
- Naturally-occurring radioactivity, including radon
- Naturally-occurring elevated concentrations of metals and other substances
- Methane & carbon dioxide production & emissions in coal mining areas, wetlands, peat moors or former wetlands

Annex 2: Identification of Potentially Sensitive Receptors -

Receptor Type	Information source
Allotments and gardens	Ordnance Survey (OS) Maps GIS - detailing Council owned property Leisure department
Residential with or without gardens	OS Maps Address Point Street directories
Schools/nurseries/playgroups	RBC Education, Youth & Leisure Services Children's Information Services
Recreational/Parks, Playing Fields, Open Space (Greens & Commons)	Leisure department OS Maps
Commercial/Industrial	LBH Industrial Profile: Industrial and Business Area Profiles OS Maps Environment Agency (EA) CD-ROM RBC Part B Processes Files
Environmentally sensitive locations	National Nature Reserves - Natural England Local Nature Reserves - RBC
Ancient Monuments (Archaeological sites); Listed/Locally Listed Buildings	English Heritage RBC Planning
Buildings (including hospitals and higher education institutions)	OS Maps
Agricultural land - crops, livestock, home grown produce, owned or domesticated animals, wild animals subject to shooting or fishing	Estate Maps OS Maps Address Point Defra FSA
Open spaces, rivers, lakes etc.	OS Maps EA CD-ROM
Controlled waters - surface water	OS Maps EA Local Environment Agency
Drinking water abstraction	EA CD-ROM Thames Water
Groundwater - source protection zones	Private Abstractions EA CD-ROM EA web page
Groundwater - major aquifers	EA CD-ROM Groundwater Vulnerability Map

Annex 3 List of Statutory Bodies and Interested Parties for Contaminated Land -

INTERNAL	EXTERNAL
<ul style="list-style-type: none"> • Environmental Services: <ul style="list-style-type: none"> ○ Building Control ○ Planning ○ Emergency Planning ○ Leisure ○ Corporate GIS • Chief Executive’s Office: <ul style="list-style-type: none"> ○ Policy & Sustainability ○ Education ○ Housing Services • Corporate Services: <ul style="list-style-type: none"> ○ Property Services ○ Legal Services ○ Finance 	<ul style="list-style-type: none"> • Department of Environment and Rural Affairs (Defra) • Environment Agency (EA) • Health & Safety Executive (HSE) • Health Protection Agency (HPA) • Ministry of Defence (MOD) • English Partnerships • English Heritage • Natural England • British Geological Survey • Food Standards Agency • Thames Water Plc • British Waterways • British Gas Property • Reading and District Natural History Society • Main mineral extractors and landfill companies • Main commercial developers • Main residential housing developers • Berkshire Local Authorities • Commercial organisations

List of Statutory Consultees for the Contaminated Land Strategy -

- | |
|---|
| <ul style="list-style-type: none"> • Health and Safety Executive (HSE) • Environment Agency • Natural England • English Heritage • Food Standards Agency (FSA) |
|---|

Annex 4: Inspection Timetable -

YEAR	TASKS
2003 - 2008	<p>Sites with a historic potentially contaminated use identified and mapped.</p> <p>Initial investigations undertaken of highest risk landfill sites.</p>
2009	<p>Historic contaminative use sites cross-referenced with current land uses and initial risk assessment undertaken.</p> <p>Site walkovers undertaken to verify current land use of highest risk sites.</p> <p>Full investigation and remediation undertaken of urgent site.</p>
2010 - 2015 onwards	<p>Continue to gather and upload onto database information on potentially contaminated sites (e.g. information from planning files).</p> <p>Undertake site walkovers to verify current land use of medium risk sites.</p> <p>Undertake initial investigation of higher risk potentially contaminated sites (with database risk scores above 50/91).</p> <p>Further detailed investigation of higher risk sites where necessary.</p>

Annex 5: Other Regulatory Regimes that Interact with Contaminated Land - Legislation -

1. Planning Regime: The Town and Country Planning Act 1990

The planning regime interacts with contaminated land legislation in the following ways:

- The vast majority of contaminated land issues are currently addressed through the planning regime. Contamination is a material planning consideration.
- Planning policy states that 70% of new build is required to be built on brownfield (previously developed) land; therefore it is vital that such sites are assessed for suitability for their proposed end use.
- It is the Council's role as Local Planning Authority to plan for land uses that are appropriate in the light of all the relevant circumstances, including known or suspected contamination.
- When considering development on land affected by contamination, the principal planning objective is to ensure that any unacceptable risks to human health, buildings and other property and the natural and historical environment are identified, so that appropriate action can be taken to address those risks. Planning conditions may be put in place require that land is remediated, taking account of its intended use, and that, if necessary, it is properly maintained thereafter.
- The possible presence of contamination should be assumed when considering development plans and individual planning applications in relation to all land subject to or adjacent to previous industrial use and also where uses are being considered that are particularly sensitive to contamination - e.g. housing, schools, hospitals, children's play areas.
- The Council's Planning department consults the EP team when an application involves land contamination matters. In the case of water pollution issues within planning applications the Planning Department contact the Environment Agency for comment.

2. Building Control

The Council's building control department, along with the private sector approved inspectors, is responsible for the operation and enforcement of the Building Regulations 2010 to protect the health, safety and welfare of people in and around buildings. This includes the requirements to protect buildings from

the effects of contamination. The recent amendments to Part C of the Building Regulations 2010 refer to resistance to contaminants. The requirements for dealing with contaminants apply to the building and any land associated with the building, and to all changes of use to residential purposes. The Building Control Officer will require measures to protect the fabric of new developments and their future occupants from the effects of contamination.

Knowledge on historic sites is shared between the Building Control and EP team, and consultation occurs between the two teams when contamination issues are likely to affect a building.

3. Environmental Damage (Prevention and Remediation) Regulations 2009

If a company causes serious environmental damage - this includes damage to surface or groundwater or contamination of land where there is a significant risk to human health - then the company responsible must remedy the damage. In England and Wales, these regulations are jointly enforced by the Environment Agency, Natural England, local councils and the Secretary of State. If the enforcing authority has to remedy the damage on behalf of the company, then it can claim the costs back from the polluter. The regulations do not apply to environmental damage caused before the regulations came into force, therefore historically contaminated land is not covered.

4. Water Pollution

Sections 161 to 161D of the Water Resources Act 1991 give the EA powers to take action to prevent or remedy the pollution of controlled waters. The EA can use a works notice under Section 161A of this Act to require remedial actions to be taken. There is therefore a potential overlap with part IIA where a remediation notice is used to clean-up a site.

The Council generally refers water pollution issues to the EA for statutory action, as the EA have specialist expertise in the field. Generally the EA and Defra advise the use of the Part IIA regime where the identification of contaminated land has been confirmed, however. The Council will consult with the EA before designating any contaminated land as a result of the risk to controlled waters and take into account any comments made with respect to remediation. The use of the other powers available to the EA will be considered at this stage.

The EA is expected to consult with the Council if it identifies a risk to controlled waters where action under Part IIA seems appropriate to enable the designation and remediation of the land to be progressed. In all consultations between the Council and the EA a prime consideration will be whether or not any land affecting controlled waters is a 'special site'.

5. Waste Management Licensing

- Where a waste management licence under part 2 of the Environmental Protection Act 1990 is in force at a site, Part IIA re contaminated land does not normally apply because the conditions of the waste management licence should deal with any pollution problem. If the pollution is from a source other than a breach of the site licence or licensed activity then action under Part IIA can be taken.
- Part IIA cannot be used to effect the removal of controlled waste, as there are powers Section 59 of the 1990 act to effect the removal of waste.
- Remediation activities on land may require an environmental permit.

6. Environmental Permitting Regulations 2010

The permits given to site operators by the EA / LA under the Environmental Permitting Regulations provide power to remedy harm caused by a breach of the permit controls. These breaches can include land contamination. Part IIA cannot be used to remedy such a breach.

7. Health Protection (Local Authority Powers) Regulations 2010

These regulations are made under the Public Health (Control of Disease) Act 1984 (as amended) and give certain powers to local authorities when dealing with an incident of contamination that may present a significant risk to human health - this could include incidents which result from land contamination. Amongst other provisions, it gives the local authority powers to decontaminate premises, people, or objects; to keep children away from school if they are contaminated; and to serve notices in order to control the spread of contamination.

8. The Water Framework Directive

The European Water Framework Directive became part of UK law in December 2003 largely via the Water Environment (Water Framework Directive) (England and Wales) Regulations 2003. It requires the implementation of a new strategic framework for the management of the water environment, and establishes a common approach to protecting and setting environmental objectives for ground waters and surface waters. The Environment Agency is the lead authority in implementing the directive in the England and Wales. The provisions of the directive have implications for contaminated land as it may to affect the levels of certain pollutants that are likely to be considered to be harmful to controlled waters.

9. The Environmental Information Regulations 2004

The Environmental Information Regulations 2004 give the public access rights to environmental information held by a public authority. The Regulations came into force on 1 January 2005 along with the Freedom of Information Act and cover any information that is considered to be 'environmental information' within the terms of the Regulations including information on land contamination.

The Regulations promote the release of as much environmental information as possible to enable increased public participation in environmental decision making. They also provide for the Council to be able to charge a reasonable fee for provision of information to cover the cost of officer time.

Annex 6: Emergency Procedure for dealing with Contaminated Sites

For Local Scale Incidents

The Council operates a 24-hour service 7 days a week including Bank Holidays for serious emergencies. A reported occurrence of contamination with serious consequences would be assessed and investigated by the Environment Agency and Council's Emergency Planning response team where appropriate.

The Emergency Planning team would take responsibility for the initial response e.g. by cordoning off the site, and would then pass on the necessary information to the Environmental Protection team to allow them to assess the site, including a full written explanation of the incident, details of the area affected and potential contamination. The Emergency Planning Officer would be available for future discussion as required.

Details of any additional grants available would be sought with the assistance of Emergency Planning.

Should the incident mean that residents cannot access their properties and or businesses are not accessible then the Emergency Planning Officer would assist with temporary re-housing/ relocation.

The site would be risk assessed and prioritised as with all other identified sites.

For Incidents Larger than Local Scale

Depending on the size and nature of the incident, the Berkshire or Thames Valley recovery planning process and/or the Science and Technical Advice Cell (STAC) would be invoked as appropriate. The Environmental Protection team would be required to provide staff to attend the STAC as part of the recovery process.

Internally, the Council would mirror the wider recovery process at Berkshire or Thames Valley level and would require an internal group to be set up to manage the local aspects. Such a group would be likely to be chaired by the Environmental Protection team.

The Council's Emergency Planning service would also provide staff to attend at other sub groups of the recovery process.

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