

Former Chiltern district area land quality and contamination strategy

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CHILTERN
District Council

Land Quality & Contamination Strategy

Originally Adopted 2001

Revised and Updated November 2008

Revised and Updated April 2014



Executive Summary

The CDC Contaminated Land Inspection Strategy was originally developed in 2001. The document outlined how Chiltern District Council would carry out its duties in collating and reviewing information on land, which may have contamination issues, that meets the statutory definition.

The purpose of this strategy review is to bring the original document up to date by highlighting the many changes in legislation and guidance and reporting on the progress to date.

Under Part IIA of the Environmental Protection Act 1990 as amended by section 57 of the Environment Act 1995, Chiltern District Council is required to inspect its area for contamination in a rational, ordered and efficient manner. This strategy, originally developed in 2001 had been produced to aid the consideration of potentially contaminated sites in the Chiltern District.

Contaminated land is defined in the legislation as being:

“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:

- (a) Significant harm is being caused or there is a significant possibility of such harm being caused, or
- (b) Pollution of controlled waters is being, or is likely to be, caused”

For contaminated land to be present a relationship must exist where a source, pathway and receptor are all present, and these are defined as follows:


Source – A substance or substances in the ground (contaminant) such as heavy metals at concentrations which could affect health or the environment.

Receptor – People, controlled water or property that could be affected if exposed to the contaminants.

Pathway – A means of the contamination coming into contact with the receptor.

Some sites may be identified outside this general approach to inspection that require urgent attention. These sites are dealt with as and when they arise.

The Council support those wishing to undertake voluntary remediation and will encourage the re-use of Brownfield / previously developed land for development.



Chiltern District Council is the lead regulator for contaminated land although, where necessary, the Council will and has worked in partnership with other organisations particularly the Environment Agency (EA) and the Health Protection Agency (HPA).

Fundamentally, the regime aims to render land suitable for its existing or any proposed use, not return land to 'Greenfield' condition. Close liaison with the planning section will be maintained.

This review focuses specifically on updating the adopted strategy to reflect changes in legislation and any new requirements of the regime.

This document also highlights the importance of working together with other sections of the Council to achieve the aims of the strategy, primarily by sharing information, and the contributions other sections of the Council make in managing land contamination matters in the Chiltern District.


In addition, it is envisaged that most contaminated land remediation will continue to be dealt with through the use of 'land quality' planning conditions and informatives. All planning applications are scrutinised using extensive scientific information and industry profiles held by Health & Housing against 'Land Quality Datasets' and where appropriate, a condition requirement notified to Planning. The developer or owner must then undertake a phased contaminated land survey and assessment which is then reviewed by Health & Housing. A site walkover and / or further information may be requested. Health & Housing then advise the Planning section upon completion of an assessment and/or remediation by the developer. The planning condition may then be discharged. Further information is contained in the Appendices. The glossary of terms (Appendix E) will assist those new to the subject. It also explains the abbreviations used.

Update of Progress

At the time of updating the strategy, there are approximately 900 potentially contaminated sites in the Chiltern District. This number is however dynamic and new information often comes to light as a result of dialogue with land owners or submitted information. This results in the addition of new potentially contaminated sites.

Significant work has been undertaken on contaminated land including:

- GIS plotting of over 1400 potential sites
- Assessment of general industrial sites: 224
- Assessment of fuel storage sites: 150
- Assessment of landfill sites: 65
- On-going assessment of GE Healthcare
- Development of new Contaminated Land conditions

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- 3 full revisions of 'CDC Developer Guidance' to help the public understand the best way to tackle contaminated land: <http://www.chiltern.gov.uk/article/2054/Information-for-Developers>
 - Development of online payment and request for environmental searches
 - Development of land quality website
 - Development of "Uniform" Contaminated Land module.



Planning application assessment:

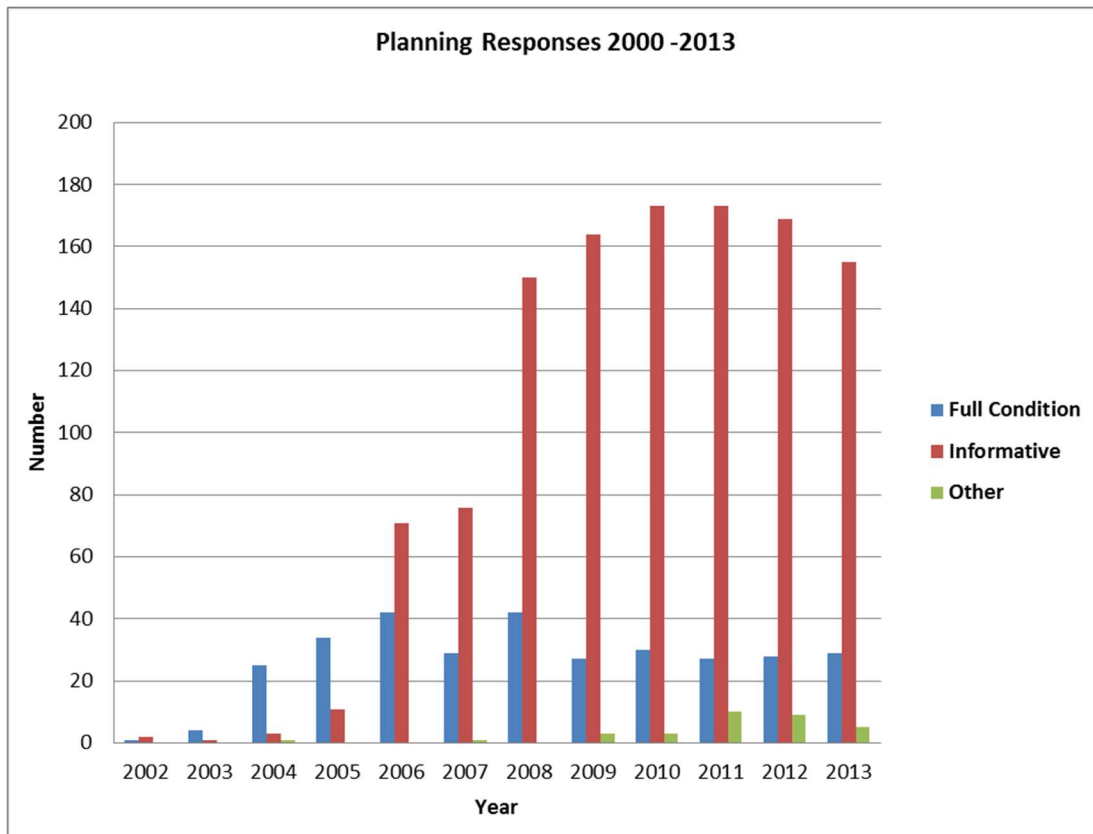
On average 30 planning applications are checked per week, (approximately 1560 per year) and cross referenced against evidence of potential contamination and for other Health & Housing risks.

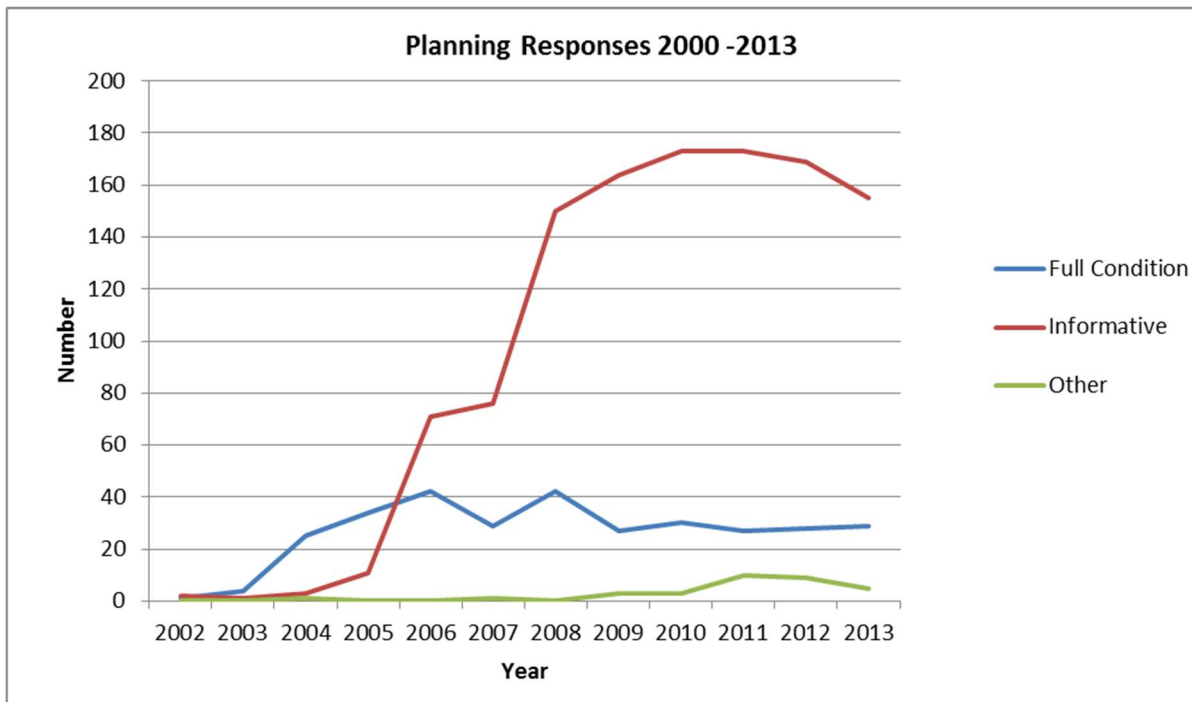
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Full condition	No	1	4	25	34	42	29	42	27	30	27	28	29
Informative	records	2	1	3	11	71	76	150	164	173	173	169	155
Other comments		0	0	1	0	0	1	0	3	3	10	9	5
Remediated	No	1	0	0	0	0	1	0	0	0	0	0	0
Total	records	4	5	29	45	113	107	192	194	206	210	206	189

Information taken from Planning Responses layer on ArcGIS

Planning consultation responses

The graph below indicates the increase in responses to planning regarding potential for land contamination.





The timeframe for applicants to undertake any necessary remediation is up to 5 years from date of permission, therefore each individual site may proceed at different rates. In addition, undertaking the 4 phases required to meet the condition may take a number of years to complete on very large sites.

The Town and Country Planning (General Permitted Development) (Amendment) (England) Order 2013

This new legislation came into force on 30th May 2013.

The change of use from offices to residential use is 'permitted development' under Class J, subject to various criteria and also subject to the developer applying to the LPA for prior approval relating to highways, land contamination and flooding risks. There is a strict 56 days to issue a decision, otherwise the developer can automatically go ahead with the proposal. Paragraph N of Class J sets out what the LPA can consider under this prior notification procedure. For contamination risks on the site, it is necessary to determine if the site will be 'contaminated land' as described in Part 2A of the Environmental Protection Act 1990. Consideration can be given to any mitigation proposed by the applicant in coming to this conclusion, but if none is proposed, then conditions cannot be imposed on this type of application - and if the site will remain contaminated land then the prior notification must be refused. That means the proposal would then require express planning permission.



Environmental Protection Act 1990: Part 2A – Contaminated Land Statutory Guidance April 2012

This new guidance was issued by the Department for Environment, Food & Rural Affairs. It updates the 2000 guidance, and is intended to explain how local authorities should implement the regime, including how they should go about deciding whether land is contaminated land in the legal sense of the term. It also elaborates on the remediation provisions of Part 2A, such as the goals of remediation, and how regulators should ensure that remediation requirements are reasonable. The guidance also explains specific aspects of the Part 2A liability arrangements, and the process by which the enforcing authority may recover the costs of remediation from liable parties in certain circumstances.

The new Guidance is simpler and clearer, and reflects a new regime intended to be more flexible than the old one. The new Guidance is reduced from 190 pages to 60 pages. The sections relating to radioactive land have been removed, and will henceforth be dealt with separately.

The concept of 'significant harm to human health.' is clarified. The guidance also clarifies the use of generic assessment criteria, and soil guideline values, and explains that sites where background levels of contamination are found would not normally be expected to be declared contaminated. These changes are intended to reduce potential blight, and unnecessary remediation. The rules for declaring contaminated land are clarified but the flexibility with which Local Authorities employ their powers is emphasised so that, for example, a declaration of contaminated land can be deferred, if the owner or another party undertakes to deal with it.

This guidance does not apply to radioactive contamination of land. Radioactive contaminated land is covered by separate statutory guidance. In the event that land is affected by both radioactive and non-radioactive contaminants both sets of statutory guidance will apply and the enforcing authority should decide what is a reasonable course of action having due regard to the relevant primary legislation and advice from the Environment Agency.

Strategic Housing Land Availability Assessment.

The Strategic Housing Land Availability Assessment required the detailed assessment and consideration of approximately 300 sites with regard to the potential from land contamination. This was updated in 2013: <http://www.chiltern.gov.uk/article/3021/Housing>



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The Strategy Process

This strategy details how the authority will approach the inspection regime and achievements to date. Particular reference has been made to Circular 01/2006 – Contaminated Land, issued by the former Department of the Environment, Transport and the Regions.

The statutory guidance required that any approach adopted shall:

- Be rational, ordered and efficient
- Be proportionate to the seriousness of any actual or potential risk
- Seek to ensure the most pressing and serious problems are located first
- Ensure that resources are concentrated on investigating areas where the authority is most likely to identify contaminated land

The following represents the work programme that has been completed under the strategy process and future areas of work.

1	Historical Land-Use Investigation Desk top survey of potentially contaminated sites	COMPLETED
2	Obtain further site specific pollutant and receptor information Approach business / landowners / interested parties for info, see section 4.3 for details on information collection	COMPLETED
3	Review of Website Guidance The CDC website will be reviewed to ensure that information and resources are up to date for land quality.	COMPLETED
4	Prioritisation of sites Site prioritisation using Priority Evaluation system based upon CLR6	COMPLETED
5	Inspection/ desk top studies of category 1 sites Sites are likely not to be suitable for present use and environmental setting. Contaminants probably or certainly present and very likely to have an unacceptable impact on key targets. Urgent assessment action needed in the short term.	COMPLETED
6	Transfer of Land Quality Data to Ordnance Survey POI Corrected Version	COMPLETED

7	Review of Developer Guidance The CDC Developers Guidance Note will be reviewed to ensure that current guidance provided to developers is correct and broadly compatible with neighbouring Authorities within the Thames Valley Region.	COMPLETED	
8	Review & Update to Cabinet The inspection strategy will be reviewed to ensure that current land uses are appropriate for their respective land uses.	Progress Update April 2014	
9	Full Review of Website/ Developer Guidance The CLAIRE website will be updated to incorporate Contaminated Land to ensure that information and resources are up to date and matching other Strategic Environment Information.	COMPLETED	
10	Review of potentially contaminated sites identified under the Strategic Housing Land Availability Assessment. Approximately 300+ sites to be assessed as part of the assessment and results provided to planning policy.	COMPLETED	
11	Implementation of UNIFORM – Contaminated Land Module Migration of all data from Landscan to Uniform.	COMPLETED	
12	Population of Uniform and back scanning Back scanning of all contaminated land reports and surveys for all sites with dynamic linking to newly created Uniform records.	COMPLETED	
13	Inspection / desk top studies of category 2 and 3 sites Sites may not be fully suitable for present use and environmental setting. Contaminants may be present and have the potential to have an impact on key targets. Assessment action needed in the medium to long term. Assessment action unlikely to be needed whilst the site remains in present use or otherwise remains undisturbed. These sites will be targeted primarily through the planning regime where a land quality condition will be placed on the site if development is sought. Alternatively, voluntary remediation will be requested where possible.	Current stream	Work
14	Inspection / desk top studies of category 4 sites Sites considered suitable for present use and environmental setting.		



Contaminants may be present but very unlikely to have an unacceptable impact on key targets. No assessment action needed while the site remains in present use or undisturbed. **Current stream** **Work**

15 Environmental Search Requests

Completion of legal and householder environmental searches

ONGOING



The Strategy Document

1 Introduction

Chiltern District Council produced its original strategy for dealing with contaminated land, under regulations that came into force on 1 April 2000. Following this, guidelines were set out in the 2006 Contaminated Land Circular and amendments to national guidance. In April 2012, new Contaminated Land Statutory Guidance was published by the Department for Environment Food & Rural Affairs.

1.1 National Objectives of the Part 2A regime

Part 2A provides a means of dealing with unacceptable risks posed by land contamination to human health and the environment, and enforcing authorities should seek to find and deal with such land. Under Part 2A the starting point should be that land is not contaminated unless there is reason to consider otherwise. Only land where unacceptable risks are clearly identified, after a risk assessment has been undertaken in accordance with the guidance, should be considered as meeting the Part 2A definition of contaminated land.

The overarching objectives of the Government's policy on contaminated land and the Part 2A regime are:


- (a) To identify and remove unacceptable risks to human health and the environment
- (b) To seek to ensure that contaminated land is made suitable for its current use
- (c) To ensure that the burdens faced by individuals, companies and society as a whole are proportionate, manageable and compatible with the principles of sustainable development.

For the full text detailing the Governments aims and objectives, see the Contaminated Land Statutory Guidance 2012.

1.2 Local Aims, Objectives and Priorities

A key Council objective is to 'Conserve the environment and promote sustainability', ensuring the continued prosperity of the district, accessibility and appropriate housing provision especially with regard to the re-development of previously developed / Brownfield sites.

The adopted Chiltern District Core Strategy has specific reference to contaminated land. In particular, policy CS4 (ensuring that development is sustainable) refers to remediation of contaminated land



Similarly, the Buckinghamshire County Structure Plan (1991 – 2011) states that “Local Plan policies should take account of the need to separate potentially polluting and other land uses to reduce conflicts and protect the natural environment”.

The combination of our local plans and national policies therefore provide a sound framework for the implementation of an effective contaminated land strategy, and promote sustainable development in the Chiltern District.

1.3 Legislation and Regulation

The origins of the current contaminated land legislation began in 1985, when it was recommended that local authorities compile a list of potentially contaminated sites. Rising demand for housing in towns and cities increased the need to re-develop previously used ‘Brownfield’ land as countryside policies restricted urban sprawl. Provisions within the Environmental Protection Act 1990 requiring the compilation of public registers for potentially contaminated land were however never enacted due to concerns that land values would be severely affected.

The Department of the Environment consultation paper entitled ‘Paying for our Past’ in 1994 effectively heralded the withdrawal of proposals for contaminated land registers and the development of new land pollution review responsibilities.

The key outcomes of this were:


- a) The commitment to the ‘polluter pays’ principle;
- b) New regimes must only effect action where existing contamination poses actual or significant potential for risks to health, and there are affordable ways of doing so.

These proposals were first published in June 1995 in the form of Section 57 of the Environment Act, forming the new Part IIA in the Environmental Protection Act 1990 which came into force in April 2000.

1.3.1 Roles and Responsibilities

Chiltern District Council, ‘The Local Authority’, is the main regulator for the contaminated land regime, dealt with by the Strategic Environment Team in the Health & Housing Division.

Part 2A requires that local authorities cause their areas to be inspected from time to time for the purpose of identifying contaminated land, and to do this in accordance with the guidance. Relevant sections of the Act include:

- 
- (a) Section 78B(1): Every local authority shall cause its area to be inspected from time to time for the purpose – (a) of identifying contaminated land; and (b) of enabling the authority to decide whether any such land is land which is required to be designated as a special site.
 - (b) Section 78B(2): In performing [these] functions... a local authority shall act in accordance with any guidance issued for the purpose by the Secretary of State.

The guidance recognises that there are two broad types of “inspection” likely to be carried out by local authorities: (a) strategic inspection, for example collecting information to make a broad assessment of land within an authority’s area and then identifying priority land for more detailed consideration; and (b) carrying out the detailed inspection of particular land to obtain information on ground conditions and carrying out the risk assessment which support decisions under the Part 2A regime relevant to that land.

The other main organisation involved in the contaminated land regime is the Environment Agency (EA). They have the responsibility for the enforcement of legislation for contaminated land designated as ‘special sites’. They are also advisors to the Local Authority with specialist knowledge relating to controlled Waters, radiation and licensed landfill activities.

Contact information for the local and regional Environment Agency Offices can be found in Appendix D – Consultees or www.environment-agency.gov.uk.

1.3.2 Defining Contaminated Land and Special Sites

A legal definition of contaminated land is given in Section 78A (2) of Part IIA of the Environmental Protection Act 1990. Contaminated land is 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:

- (a) Significant harm is being caused or there is a significant possibility of such harm being caused (see appendix B and C); or
- (b) Pollution of controlled waters is being, or is likely to be caused

Section 78A (5) requires the regulatory authority to act in accordance with guidance issued by the Secretary of State in determining significance and likelihood.

Special Sites

Special sites are enforced by the Environment Agency, and will most commonly be determined where the pollution of controlled water is caused by contaminated land. Special sites may also be declared where contaminated land falls into the following criteria:

- Land that is contaminated land by reason of waste acid-tars in, on or under the land.
- Land on which any of the following activities have been carried on at any time:
 - The purification (including refining) of crude petroleum or of oil extracted from petroleum, shale or any other bituminous substance except coal.
 - The manufacture or processing of explosives.
- Land covered by a nuclear site licence and land owned or occupied by or on behalf of the ministry of Defence.
- Land on which the manufacture, production or disposal of - chemical weapons and any biological agent or toxin.
- Land which –
 - (i) Is adjoining or adjacent to land of a description specified above; and
 - (ii) Is contaminated by virtue of substances which appear to have escaped from land of such description

1.3.3 Dealing with Contaminated Land

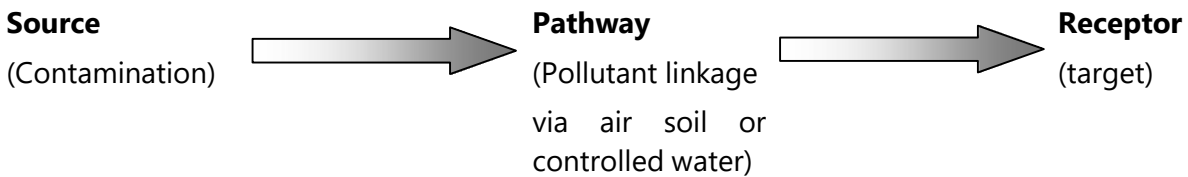
If an area of contaminated land has been identified, the approach for dealing with it will be the same regardless of whether the Local Authority or the Environment Agency is the regulator. There are four main stages to this approach, and the lead regulator will:

- i. Establish who is the "appropriate person" to hold responsibility for the remediation (or "clean-up") of the land.
- ii. Decide what remediation is required and to ensure that this occurs, through:
 - Reaching a voluntary agreement
 - Serving a remediation notice, if agreement cannot be reached
 - Carrying out work themselves, in certain circumstances
- iii. Determine who should bear what proportion of the liability for meeting the costs of the work
- iv. Record certain information about regulatory action on a public register.

1.3.4 Pollutant Linkages and Risk Assessment

For a site to meet the definition of contaminated land, a pollutant linkage must be established. A pollutant linkage consists of three parts:

- i. A source of contamination in, on or under the ground
- ii. A pathway by which the contaminant is causing significant harm (or which presents a significant possibility of such harm being caused)
- iii. A receptor of a type specified in the regulations



If the three components of the pollutant linkage exist, a risk assessment will be undertaken by the Council to determine the likelihood of harm being caused, and the likely nature and extent of the harm caused if the predicted event actually occurred. An area of land can only be designated contaminated land if a significant risk has been identified.

The new Contaminated Land Statutory Guidance 2012 clearly lays out the process of risk assessment, the definition of contaminated land, the process for determination of contaminated land, remediation action, liability and recovery of costs.

Tables detailing significant harm and the likelihood of significant harm can be found in Appendices B and C.

2.0 Characteristics of the Chiltern District and its Influence on the Regime

This section gives the background to the Chiltern District and describes how this influences the Council's approach to inspecting land for contamination.

2.1 Local Geography

Located in the South East of the county of Buckinghamshire, bordering Hertfordshire, the district lies in the centre of the Chiltern Hills, from which its name is derived. The districts of South Bucks, Wycombe and Aylesbury Vale form the Western boundaries.



Figure 1: Map of the Chiltern District Area.



2.2 Area Description / History

The District itself is a mix of suburban and rural, with four main population centres. The rural character of the District is preserved by the green belt policy that acts to limit the urban sprawl of Greater London.

The District's expanse of open areas and its proximity to London does mean that it has at times been used for waste disposal purposes, and small landfill sites are common. The district has not been heavily exploited for its mineral reserves, there being only a few sand and gravel pits. Some use is made of the small pockets of London clay for brick-making and in some cases; old workings may have been used for landfill.

2.3 Size and Population

The District covers some 50,000 acres with a population of approximately 89,800 people. Approximately 70% live in the towns of Chesham (20,600), Amersham with Chesham Bois (15,500), and the villages of Chalfont St Peter (13,100), Prestwood and Great Missenden (10,500), Little Chalfont (4,400), and Chalfont St Giles (6,500).

2.4 Current Land Use Characteristics

The main use of land in the District, other than for residential use, is for agriculture. Current industrial activity is generally restricted to a number of small-medium size industrial estates, with only a handful of manufacturing operations.

2.5 Land Owned by the District Council

The District Council has limited land holdings in the District, these principally being civic buildings and car parks.

The Council does not own any housing stock as this was transferred to Paradigm Housing in 1988.

2.6 Protected Locations

Chiltern District has a rich and diverse historic heritage that encompasses archaeological sites, 1093 Listed Buildings, 22 Ancient Monuments and 20 designated Conservation Areas. Additionally, selected parks and gardens have been noted for their special historic interest.

- The vast majority of the district is designated as part of the Chilterns Area of Outstanding Natural Beauty (AONB).

- No National Nature Reserves (NNR's) exist within the District; however Captains Wood near Chesham has been designated as a Local Nature Reserve.
- Four Sites of Special Scientific Interest (SSSI's) have been designated within the District – Sarratt Bottom, Frogmoor Meadows, Hodgemoor Woods, and Froghall Brickworks site.

It is noted that from time to time new sites may become protected and existing sites may change to become sites of greater importance. It is therefore proposed that sites are reviewed annually to determine any such changes

The Council supports the conservation and enhancement of such valuable features, therefore their protection from the effects of contaminated land is a prime concern.

2.7 Local Geology




Stretching out from the area forming the Chiltern Hills, the underlying geological strata of Chiltern District is predominantly chalk, dipping gently to the South East under the tertiary deposits of sandy Thanet beds, and in places, London Clays. The chalk is divided into lower, middle and upper units, with the upper chalk constituting the majority of exposed chalk at the surface, whilst the middle and lower chalk are exposed only in the deeper valleys.

The local geology is therefore an important consideration when assessing the potential for the contamination of groundwater and the spread of pollution.

2.8 Local Hydrogeology – Surface and Groundwater

Two rivers cross the District; the Chess and the Misbourne draining South Eastwards, away from the crest of the Chiltern Hills. Both are tributaries of the River Colne which flows into the Thames. Monitoring conducted by the Environment Agency currently categorises the Chess and Misbourne as 'good' to 'very good' quality. The protection of these rivers from contamination is therefore of concern.

The underground strata of chalk, gravel and sand form major and minor aquifers. The chalk aquifer is often referred to as a dual porosity aquifer, whereby groundwater movement is governed by intergranular (matrix) flow that is predominantly slow (1 metre per year). However approximately 1% of the aquifer contains fissures whereby groundwater flow is rapidly transmitted via these fissures/fractures. Flow is usually towards the South East.



Where the chalk is near to the surface, as for the vast majority of the Chiltern District area, the soil above has little effect as a filter for pollution. This means that the soil leaching potential is high, and the groundwater is vulnerable to pollution. The most vulnerable areas are currently identified as Amersham and Chesham towns, and the Chess and Misbourne Valleys.

2.9 Water Resource / Protection Issues

The Environment Agency document 'The Policy and Practice for the Protection of Groundwater' sets out the EA's approach to the concept of Groundwater vulnerability to pollution. This includes the definition of protection zones around key boreholes, classification of aquifers depending on their vulnerability and describes potentially contaminating activities which require control.

The Environment Agency seeks to protect groundwater resources from which water is abstracted through the use of source protection zones. There are three source protection zones:

- Zone I (Inner Source Protection - 50 day travel time)
- Zone II (Outer Source Protection – 400 day travel time)
- Zone III (Source Catchments - complete catchment)

The classification of an area as falling within a source protection zone is one of travel time of a substance to the point of abstraction. The Environment Agency regards the investigation of potentially contaminated land within a source protection zone as of greatest priority.

Three Valleys Water have pumping stations and boreholes in the district for public supply abstraction, and in addition, there are approximately 17 private drinking water supplies currently in use, which the District Council monitors from time to time. These supplies are spread throughout the district.

2.10 Past and Present Industrial History

The area has not been subjected to a great deal of large-scale industrial activity, however smaller scale light industry is commonplace. Such small businesses were often located in the major population centres and this may well have the effect of creating small pockets of contaminated land in what are now residential areas.

2.11 Known Information on Contamination

The Council has been undertaking an extensive information gathering exercise over the past 15 years and is now much better positioned to consider sites when they are identified. Information on former fuel sites, CDC planning history, land filled areas, pollution incidents, authorised processes,



general industry and historical land uses have been extensively developed and dynamically linked to the Chiltern GIS system. This information is constantly updated with new information updated on a daily basis.

If development is proposed on an area of land where past use may have resulted in contamination, the Health & Housing Division will request a site investigation as part of the land quality planning condition. If development proceeds on these sites, an investigation will be submitted and then if required, remediation to improve the site agreed.



3.0 Arrangements and Procedures

Within the District Council, the Health & Housing Division has responsibility for the implementation of Part IIA EPA 1990. Procedures have been drawn up to describe how contaminated land issues will be handled within the Council. This section also details the level of service the business community and members of public can expect from the Council in dealing with these issues.

3.1 Internal Management Arrangements

3.1.1 Financial Implications

Financial resource implications can be broken down into three main areas:

1. Site investigation
2. Litigation
3. Remediation in default

Site investigations require significant training for the staff involved. Additionally, and for those more complex sites, expert assistance may be required for more intrusive investigation.

The potential for litigation within the regime is one of high financial concern, the main areas being:

- Claims over wrongly designated areas of contaminated land
- Claims of loss of land value

Clear-up of land as works in default after the service of a Remediation Notice is likely to be expensive and is extremely likely to require further litigation for cost recovery.

It is the aim of the strategy however to set out the issues over dealing with contaminated land clearly, transparently and without cause for undue alarm with the intention of minimising the above occurrences.

3.2 Considering Local Authority Interests in Land

Investigation of Council-owned land will be carried out as part of the category-by-category inspection schedule. The Council has some limited land holdings within the District. There are other areas of land within the District that the Council (or its predecessors) has owned at some stage in the past where potentially contaminative activities may have occurred.

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

3.3 Information Collection

Many sources of information have been required to identify potential sources of contamination and potential receptors. Specific examples of the resources are detailed below.

Resource	Description	Use
Geological Maps	Information from the British Geological Survey provide 1:50 000 maps showing solid and drift geology	To characterise sources and pathways
Health & Housing Records	CDC maintains records of complaints and investigations	To identify known information on contamination
Planning Records	CDC holds detailed planning records of development in the area, including information on ground condition presented in surveys	To identify known information on contamination
Full Conditions and Informatives	A record is kept of each planning application that has been given a full condition or an informative for environmental reasons.	To identify areas that may be being dealt with
Historic Maps	OS Mapping of the Chiltern District over the last 100 years.	To identify sources of contamination
Integrated Pollution Control Register	CDC has maintained a public register containing details of authorised industrial processes in the District	To identify sources of contamination
Waste Management Licences	The Environment Agency maintain a public register of sites licensed for waste management activities and have provided relevant information relating to sites in the District.	To identify sources of contamination

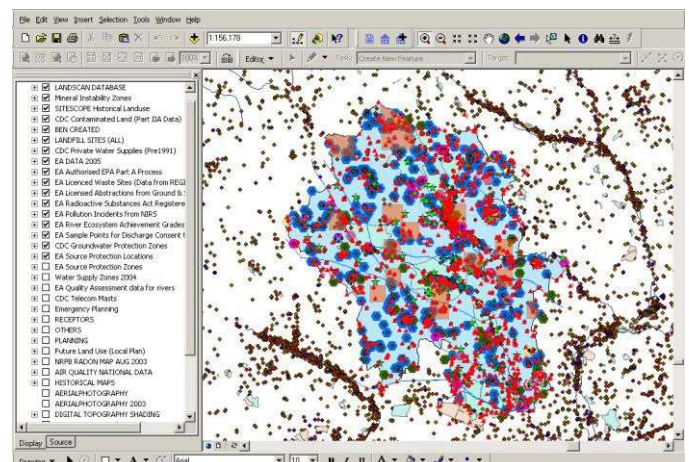


Fuel Tanks Trading Standards	– Historical information on the location of fuel tanks / storage	To identify sources of contamination
Pollution Incidents	A record of pollution incidents	To identify sources of contamination
Register of Closed Landfill Sites	CDC has information on closed landfill sites	To identify sources of contamination
CDC Contaminated Land (Part IIA)	Land deemed as potentially contaminative to the land under Part IIA EPA 1990 by CDC	To identify sources of contamination
SITESCOPE	Historical land uses that could be deemed as potentially contaminative to the land under Part IIA EPA 1990	To identify sources of contamination
Search Reports	Environmental searches completed by external environmental consultants/companies	To identify sources of contamination
Radioactive Substances Act Registered Sites	A register of sites that have used radioactive substances, both presently and historically	To identify sources of contamination
Hydrogeological Maps	The Groundwater Vulnerability Maps (1:100 000) produced by the National Rivers Authority and the Soil Survey and Land Research Centre in 1993 are used to assess the potential for contamination of groundwater	To identify receptors (controlled waters)
Source Protection Zones	Areas of groundwater that receive special protection by the Environment Agency are identified	To identify receptors (controlled waters)
Planning Records	CDC will determine proposed land use of new developments, such as residential properties or commercial buildings	To identify receptors
Colne LEAP	Local Environment Agency Plan for the Colne valley	To identify

District Local Plan	A valuable source of information on land use, particularly regarding historic monuments and protected areas of the environment	To identify receptors
Private Water Supplies	A register is available of all private water supplies, with information provided for the type of treatment, when available. Historical information is also accessible	To identify receptors (humans)
CDC Groundwater Protection Zone	Areas specifically designated for the protection of groundwater	To identify receptors (controlled waters)
English Nature	Information on 'Sites of Special Scientific Interest' and Ancient Woodlands.	To identify receptors (ecosystems)
Bucks County Council	County-wide designations of historic parks, natural habitats, conservation areas, and ancient monuments.	To identify receptors (ecosystems and property)
Areas of Outstanding Natural Beauty	Areas designated at 'Areas of Outstanding Natural Beauty'	To identify receptors (ecosystems and property)

3.4 Information Management

The Council implemented a new Geographical Information System (GIS) in 2003, and therefore computer based information is now the primary tool used to manage contaminated land. However, significant information such as reports are still generally submitted as paper files and therefore this results in the requirement for storage. Document scanning is currently being incorporated. Reports are requested in electronic format where possible. All new submissions will be electronic where possible.





3.5 Complaints and Provision of Information

From time to time, the Council may receive a complaint regarding contaminated land from a member of the public, business or community group. Interested residents may also voluntarily supply information relating to land contamination that is not directly affecting themselves, their families or their property. These complaints or acts of information provision may impact on the approach to inspection and so the procedures to be adopted are detailed here.

3.5.1 Complaints

A complaint received regarding significant contaminated land will be dealt with following the same procedure as currently used by the rest of the Health & Housing Division.

All complainants may expect:

- Their complaint to be logged and recorded
- To be contacted by an officer regarding their complaint within three working days of receipt
- To be kept informed of progress towards resolution of the problem.

Every effort will be made to resolve complaints quickly and efficiently. The legislative framework does, however, present a number of obstacles to speedy resolution of problems:

- i. Proof of a viable pollutant linkage before any formal designation as contaminated land is permissible, which might only be possible with detailed investigation
- ii. Prior consultation with interested parties before designation as contaminated land
- iii. A minimum of a three month period between designation and serving of a remediation notice
- iv. The requirement for the enforcing authority to make every effort to identify the original polluter of the land (or "Class A" person) The regulations allow conditions (ii) and (iii) to be waived in extreme cases, but not conditions (i) and (iv).

3.5.2 Confidentiality

All complainants will be asked to supply their names and addresses, and the address giving rise to the complaint. The identity of the complainant will remain confidential. The only circumstance in which this information might be made public would be in the case of a remediation notice being appealed in a court of law and an adverse effect on the complainant's health was an important reason for the original contaminated land designation.



3.5.3 Voluntary Provision of Information

If a person or organisation provides information relating to contaminated land that is not directly affecting their own health, the health of their families or their property, this will not be treated as a complaint. The information will be recorded and may be acted upon, in the future, for example when planning permission is sought. Unless representing a site owner, there will be no obligation for the Council to keep the person or organisation informed of progress towards resolution.

3.5.4 Anonymously Supplied Information

The Council does not normally undertake any investigation based on anonymously supplied information, and this general policy will be adopted for contaminated land issues. This policy does not, however, preclude investigation of an anonymous complaint in exceptional circumstances.

3.6 Site Prioritisation

Sites identified as being potentially contaminated, will be prioritised and subjected to further investigation by way of an evaluation and where appropriate, a walk over survey of the site. This will entail prioritising sites thought to be posing a risk to human health, water, the environment and structures for further investigation.

3.6.1 Priority Evaluation

In order to carry out the task, account will be taken of current advice, including the Contaminated Land Exposure Assessment (CLEA) model. Significant amounts of guidance have been introduced over the last few years.

The scoring process based on CLR 6 is used to complete a contaminant – receptor pathway (CRP) assessment to identify which priority category a site may fall into. Site information will reveal potential contaminants and/or sensitive receptors, but the CRP assessment will only take place where both contaminant and receptor are present. See Appendix B.

Following this stage, the Council may contact a current land owner concerning a specific site with regard to obtaining access and to ascertain whether further information is available concerning the condition of the site.



3.6.2 Site Investigation

The purpose of the site investigation is to provide further information to the Council in the execution of its' statutory duties as to whether a site "statutorily contaminated," that is to say, it poses a significant risk to a receptor.

This process is carried out in accordance with CLR 2 Guidance on preliminary site inspection of contaminated land. Where necessary the Council will refer to environmental consultants to receive advice on the toxicological aspects of site contamination.

3.6.3 Site Remediation

Where it is established that a site is "statutorily contaminated" remediation action must be taken. This may first be through informal agreement with the land owner(s) or if this is not possible by way of service of remediation notices. In either case a remediation strategy must be agreed with the Council.

Action will be taken as soon as the Council is aware that a site is presenting a significant risk to a specified receptor. It is likely that enforcement action will occur at any stage of this process as it is unable to predict as and when such sites will become apparent.


Site remediation may thus occur, either under the Part IIA regime or more likely through the redevelopment of land. In either case, remediation of the land will be dictated by a risk based approach in accordance with current Government advice and scientific knowledge and advice from the Environment Agency.

3.7 Risk Assessment

All information on substances in, on or under the ground that may cause significant harm or pollution will be evaluated against current governmental guidelines.

3.7.1 CLEA and ICRL Guidelines

In March 2002, the Department for Environment, Food and Rural Affairs (DEFRA) and the Environment Agency published a comprehensive package of technical guidance relevant to the assessment of human health risks arising from long-term exposure to contaminants in soil - the [CLEA package](#). The Government's view is that this package supersedes, in respect of human health, work published by ICRL, and in particular, the Trigger Values set out in ICRL 59/83.



As a result, DEFRA issued a letter on 20th December 2002 announcing the complete withdrawal of ICRL Guidance Note 59/83 (2nd Edition). The ICRL standards are no longer suitable for implementing the current contaminated land regime and will no longer be accepted as part of a submitted report.

The CLEA package, consisting of the main reports CLR 7 – 10 (CLR7 withdrawn 2008), the CLEA software and the Soil Guideline Values for individual substances (SGV) are now considered to represent the key instruments for generic assessment of the health risks from land contamination. They represent a cross-government consensus on the technical approach to undertaking such assessments. These guidelines and technical data are currently being revised.

3.7.2 Risk Assessment for Other Substances

Risk assessments may also be required for substances not covered by CLEA guidelines. In these cases, reference may be made to occupational exposure levels issued by the Health and Safety Executive or other authoritative sources of information, such as guidelines adopted in other countries. If guidelines from other countries are referred to, it will be important to bear in mind the significant difference in remediation standards between the UK and these other countries. If alternative standards are used, justification should also be included.

3.7.3 Risk Assessment for Controlled Waters

Advice will be sought from the Environment Agency on risk assessment if controlled waters are the receptor in a particular pollutant linkage. It is anticipated that risk assessments and remediation will be carried out in accordance with Environment Agency guidance as laid down in "Methodology for the Derivation of Remedial Targets for Soil and Groundwater to Protect Water Resources" (EA R&D Publication 20, 1999) with reference to Environmental Quality Standards (EQS) and River Quality Objectives (RQO). New soil guidelines 'The Way Forward' CLAN 6/06 gives further guidance on acceptable levels; however site specific advice will be sought from the Environment Agency at relevant sites.

Where a potential pollutant linkage includes a Water Company public water supply source as a receptor, the water company concerned shall be notified by the Environment Agency and/ or Local Authority.

3.8 Enforcement

Where a formal designation of contaminated land is required, the following actions will be undertaken:



Designating an area of contaminated land

- Write to the owner and / or the occupier of the land at least 5 working days prior to designation, explaining in summary the reason for designation
- Write to the owner and / or the occupier explaining the land has been designated as contaminated land and seeking appropriate remediation without service of a notice
- If requested, dispatch a copy of the written risk assessment to the owner and / or occupier of the land within 5 working days of receipt of a request
- Write to the owner / occupier of neighbouring properties and / or the complainant within 5 working days of designation

3.8.1 Apportioning Liability

When land has been declared contaminated within the meaning of Section 57 of the Environmental Protection Act 1990 and all pollutants linkages have been established, the procedure for the apportionment of liability can begin. There are 5 stages to follow before liability can be apportioned,

- a) Identify potential appropriate persons and liability groups
- b) Characterise remediation actions
- c) Attribute responsibility to liability groups
- d) Exclude members of liability groups
- e) Apportion liability between members of a liability group

These procedures are complex and once identified may be classified as either a "Class A" or "Class B" person;

Class A The polluter or persons who knowingly permit pollution


Class B Where no class A person can be found liability reverts to the owner or occupier

3.8.2 Powers of Entry

Under Section 108(6) of the Environment Act, the Council has been granted powers of entry to carry out investigation. At least seven days' notice will be given of proposed entry onto any premises, unless there is an immediate risk to human health of the environment.

3.8.3 Enforcement Action

The service of a remediation notice must follow a definite procedure:

- 
- Written notification of intention must be issued to the owner / occupier of land
 - A three month time period as specified in Circular 01/2006 must be given, after which the Council will issue a written remediation notice to the owner / occupier specifying action required
 - Write to the owner / occupier of neighbouring properties and / or the complainant within 5 working days of notice being served

Should designation of contaminated land be required, these steps will be observed as far as practicable although some deviation from the timescales specified may occur in an emergency. Appeal provisions are determined in the legislation.

3.9 Interaction with Other Regulatory Regimes


There are other regulatory actions that can be taken to deal with contamination on land. Overlaps with planning, water pollution and IPPC legislation are considered the most important and are addressed here. Any issues of land contamination that may previously have been dealt with under the statutory nuisance regime will now be dealt with through Part IIA processes.

3.9.1 Planning and Development Control

Nearly all contaminated land issues are addressed through the planning process. However, this only occurs where planning permission has been sought for development on a site which has already been identified by the Health & Housing Division as land known to be or thought to be contaminated. Contaminated land issues are then taken into account as a material consideration in determining the planning application. The introduction of Part IIA has resulted in a significant increase in the information held on potentially contaminated sites. This detailed information therefore allows the planning regime to remain the main mechanism for taking account of contaminated land issues. Should remediation works be required as a planning condition imposed on a planning permission then those works would be dealt with under the terms of the planning permission rather than under Part IIA.

3.9.2 Building Control

It is a requirement of the Building Regulations 2000 (as amended) that, “reasonable precautions shall be taken to avoid danger to health and safety caused by contaminants on or in the ground covered, or to be covered by the building and land associated with the building” – (Requirement C1). Guidance on satisfying this requirement is contained within the Approved Document C, (site preparation and resistance to contaminants and moisture). This document outlines appropriate means of dealing not only with solid and liquid contaminants arising out of previous use of land but also gases, particularly landfill gas.



The requirement applies to all buildings which fall within the control of Building Regulations. In view of the existence of a number of 'approved inspectors', authorised by the Construction Industry Council to administer the Building Regulations, owners of land may choose to have works supervised by someone other than a Local Authority Building Control Surveyor. Consequently any contamination found and precautions agreed could remain unknown to this Council. Further, 'approved' inspectors have no enforcement powers under the Building Regulations as these lie with the Local Authority.

The contaminated land lead officer will maintain the flow of information if a Building Control Surveyor from Chiltern District Council supervises building or extensions to buildings erected on contaminated land. In the event that precautions are not considered to be reasonable, plans will not be approved (or conditionally approved with specific conditions as to further information/precautions required) and/or enforcement action will be pursued under the Building Act 1984.

3.9.3 Existing Health & Housing Legislation

Prior to the introduction of Part IIA the Environmental Health section dealt with contaminated land issues which arose as a result of resident or business complaint, where no other regulatory regime was applicable, through the statutory nuisance provisions of the Environmental Protection Act 1990.

Where issues occur that are not defined as contaminated land but are potentially a nuisance; such as dust, odour, drainage etc. these continue to be dealt with by the Environmental Health Section.

3.9.4 Water Pollution

The Water Resources Act 1991 gives the Environment Agency powers to deal with harm to controlled waters being caused by contaminated land. While Part IIA legislation does not revoke these powers, DEFRA have indicated that such problems should now be dealt with under the new contaminated land regime. The following steps will be taken:

- The Council will consult with the Environment Agency before designating any contaminated land as a result of risk to controlled waters and will take into account any comments made with respect to remediation.
- If the Agency identifies a risk to controlled waters from contaminated land, the Council will be notified to enable designation of the land and remedial action will be taken under Part IIA.



3.9.5 Integrated Pollution Prevention and Control (IPPC) and Environmental Permitting

Under this legislation to regulate industrial processes, site operators are required to undertake a site condition survey prior to receiving a permit to operate. If the site condition is such that areas of land meet the definition of contaminated land, then submission of a site survey may trigger action under Part IIA. Part A2 Processes are required to submit a land quality survey upon being granted a Permit

3.10 Liaison and Communication

Throughout implementation of the strategy effective liaison is required with other bodies.

3.10.1 Statutory Consultees

Statutory Consultees for the original Contaminated Land Inspection Strategy were:

- Environment Agency
- English Nature
- English Heritage
- Ministry of Agriculture, Fisheries and Food
- Food Standards Agency
- South East Regional Development Agency
- Buckinghamshire County Council


Each organisation was invited to comment on the consultation draft of the original strategy.

3.10.2 Non-statutory Consultees

There is great scope for members of the public, businesses and voluntary organisations to play an important role in dealing with contaminated land in the District. Efforts have been made to encourage participation in the process of identifying and investigating contaminated land, recognising the valuable contribution of these sectors. The council's web site has also been used as a consultation tool and now provides a copy of the strategy and developer guidance notes.

3.10.3 Communicating with Owners, Occupiers and Other Parties

The District Council's approach to its regulatory duties is to seek voluntary action before taking enforcement action. This approach, recommended by Government recognises that in most cases much more effective remediation can be achieved by agreement than by enforcement. The



regulations provide an incentive to undertake voluntary action, in that any materials that require disposal as a result of voluntary remediation will be exempt from landfill taxes. This exemption does not apply to materials generated as a result of a remediation notice having been served.

This approach requires effective communication with owners, occupiers and other interested parties. The Strategic Environment Team are the central contact point within the authority on contaminated land issues and as such endeavour to keep owners, occupiers and other interested parties informed at each stage of an investigation, regardless of whether there is a formal designation of contaminated land.

3.10.4 Risk Communication

Contaminated land issues can be very complex and do not generally lend themselves to easy explanation, due to the significant volume of technical and legal guidance. Indeed formal designation from development of effective methods of risk communication is therefore essential.

The Council will treat any concerns raised by a member of the public seriously and with respect, recognising the importance of the issue to the individual. In all instances, the Council will recognise and try to overcome the critical barriers to effective risk communication:

- **Familiarity** – increased concern about unfamiliar issues
- **Control** – increased concern if the individual is unable to exert any control over events
- **Proximity in space** – increased concern about nearby events
- **Proximity in time** – increased concern about immediate consequences rather than long term effects
- **Scale** – particularly in terms of media coverage, where one large incident appears much worse than several small incidents
- **“Dread factor”** – lack of understanding can lead to stress and make further explanation more difficult

These regulations grant only limited powers to Local Authorities to deal with materials present in, on or under the ground. Many members of the public believe that any material that is not naturally present in the ground should be removed, especially if it is in the vicinity of their own home. It will be critical to explain this can only be done where this is a risk of significant harm, and it is to be expected that some members of the public will have difficulty accepting this.

It is important to appreciate that the expectations of some members of the public will not be met by the powers local authorities may exercise under contaminated land legislation.



3.10.5 The Public Register

Under the regulations, the Council is required to maintain a public contaminated land register. The Strategic Environment Team at the Council's Amersham office hold this register. It is accessible on request by members of the public during office hours, Monday to Friday.

The regulations clearly specify the information that can be recorded on this register. This includes:

- Remediation notices
- Details of site reports obtained by the authority relating to remediation notices
- Remediation declarations, remediation statements and notifications of claimed Remediation
- Designation of sites as "special sites"
- Any appeals lodged against remediation and charging notices
- Convictions

The public register however does **not** include details of historic land use and other working documents used in the investigation of potentially contaminated land. The working papers will not be made available to the public.


3.10.6 Environment Agency Liaison

The Environment Agency is required to prepare an Annual Report for the Secretary of State on the state of contaminated land in England and Wales.

This report includes:

- A summary of Local Authority inspection strategies, including progress against the strategy and its effectiveness
- The amount of contaminated land and the nature of the contamination
- Measures taken to remediate land

As local authorities are the lead regulators on contaminated land, with the EA regulating only some categories of sites, the national survey will clearly be reliant on information provided by Local Authorities. A memorandum of understanding has been drawn up between the Environment Agency and the Local Government Association that describes how information will be exchanged between the Local Authority and the Environment Agency. The Council will therefore provide information to the Environment Agency following the guidelines agreed through this national forum.



The Local Authority must also provide information to the Environment Agency whenever a site is designated as contaminated land, and whenever a remediation notice, statement or declaration is issued or agreed. The Environment Agency has provided standard forms allowing this information to be provided in a consistent format and the Council will adopt these to fulfil its reporting requirements.

Additionally, the Environment Agency may undertake, at the request of the Local Authority, site investigations with regard to potential special sites to enable determination under the Part IIA definition. This will only be done at the request of the council and after detailed discussion.

3.10.7 Public Health England (PHE) Liaison

The Council is a member of the South East Non-Infectious Environmental Hazards Group and have procedures in place for liaison regarding potentially contaminated sites.

3.10.8 Internal Communication – Planning Section

Land contamination is a material consideration for the purposes of Town and Country Planning. The Government's planning advice on contaminated land is set out in Planning Policy Statement 23 (PPS23), 'Planning and Pollution Control (2004). Annex 2 addresses the issue of development on land affected by contamination.

Since March 2012 the provisions of PPS 23 have been incorporated into the National Planning Policy Framework. Thus the Council ensures that developers address contamination issues as part of the development process.

Where there is reason to suspect that a site may be contaminated then certain information will be required to support planning applications in relation to that site. Persons are advised to contact the Strategic Environment Team at the earliest opportunity if they are aware of contamination at any proposed development site.

Investigation and risk assessment will need to be undertaken at potentially contaminated sites, the findings of which should be supplied in support of planning applications. Such work should be completed by suitably qualified contractors or consultants. Should the work indicate that contamination may pose unacceptable risks then remediation and/or mitigation measures will need to be undertaken prior to the commencement of development. Such work is likely to be more difficult and expensive if it is not commenced until development is already underway.

Land contamination reports submitted to the planning department in support of a planning application will be reviewed by the Strategic Environment Team to ensure that it is compliant with



statutory guidance and that recommendations are suitable. The Strategic Environment Team will advise on planning condition requirements and likely requirements for further investigation and remediation.



4.0 System of Review

This strategy outlines the general approach to be taken in inspecting land in the District for contamination. This section will describe instances when inspections will occur outside this general inspection framework, circumstances under which previous inspection decisions should be reviewed and measures to be taken to ensure the strategy remains effective and up-to-date.

4.1 Triggers for Undertaking Inspection

The strategy has already recognised that many inspections are carried out outside of the general inspection framework.

Triggers for undertaking non-routine inspection will include:

- **Planning application for redevelopment of a site** – The underlying principle for dealing with contaminated land is to do this through a voluntary basis or using a planning condition.
- **Unplanned events** – e.g. ground collapse at unknown landfill site
- **Introduction of new receptors** – e.g. if housing is to be built on a potentially contaminated site, designation of a new protected ecosystem, persistent trespass onto a site by young people
- **Supporting voluntary remediation** – e.g. a potentially liable party wishing to undertake clean-up before their land has been inspected by the local authority
- **Identification of localised health effects** which appear to relate to a particular area of land
- **Responding to information** from other statutory bodies, owners, occupiers, or other interested parties

4.2 Triggers for Reviewing Inspection Decisions:

In addition there may be occasions where the findings of previous inspection decisions should be reviewed. This might occur, for example, if there were

- Significant changes in legislation
- Establishment of significant case law or other precedent
- Revision of guideline values for exposure assessment

It is important therefore that all decisions are made and recorded in a consistent manner that will allow efficient review.



4.3 Reviewing the Strategy

As part of the overall quality management of this work, it is important to consider the need to review the strategy from time to time.

The next review is scheduled to take place in April 2019 and the findings will be reported to the Council's Cabinet. If there are significant changes to the strategy, it may be appropriate to update the Cabinet.

APPENDIX A

Potentially Contaminative Industrial Land Uses

Animal and animal products processing works.

Asbestos manufacturing works.

Ceramics, cement and asphalt manufacturing works.

Chemical works: coatings (paints and printing inks) manufacturing works.

Chemical works: cosmetics and toiletries manufacturing works.

Chemical works: disinfectants manufacturing works.

Chemical works: explosives, propellants and pyrotechnics manufacturing works.

Chemical works: fertiliser manufacturing works.

Chemical works: fine chemicals manufacturing works.

Chemical works: inorganic chemicals manufacturing works.

Chemical works: linoleum, vinyl and bitumen-based floor covering manufacturing works.

Chemical works: mastics, sealant, adhesive and roofing felt manufacturing works.

Chemical works: organic chemicals manufacturing works.

Chemical works: pesticides manufacturing works.

Chemical works: pharmaceuticals manufacturing works.

Chemical works: rubber processing works (including works manufacturing tyres or other rubber products).

Chemical works: soap and detergent manufacturing works.

Engineering works: aircraft manufacturing works.

Engineering works: electrical and electronic equipment manufacturing works (including works manufacturing equipment containing PCBs).

Engineering works: mechanical engineering and ordnance works.

Engineering works: railway engineering works.

Engineering works: vehicle manufacturing works.

Gasworks, coke works and other coal carbonisation plants.

Metal manufacturing, refining and finishing works: electroplating and other metal finishing works.

Metal manufacturing, refining and finishing works: iron and steelworks.

Metal manufacturing, refining and finishing works: lead works.

Metal manufacturing, refining and finishing works: non-ferrous metal works (excluding lead works).

Metal manufacturing, refining and finishing works: precious metal recovery works.

Oil refineries and bulk storage of crude oil and petroleum products.

Power stations (excluding nuclear power stations).

Pulp and paper manufacturing works.

Railway land.

Road vehicle fuelling, service and repair: garages and filling stations.



Road vehicle fuelling, service and repair: transport and haulage centres.

Sewage works and sewage farms.

Textile works and dye works.

Timber products manufacturing works.

Timber treatment works.

Waste recycling, treatment and disposal sites: drum and tank cleaning and recycling plants.

Waste recycling, treatment and disposal sites: hazardous waste treatment plants.

Waste recycling, treatment and disposal sites: landfills and other waste treatment or waste disposal sites.

Waste recycling, treatment and disposal sites: metal recycling sites incl. scrap metal.

Waste recycling, treatment and disposal sites: solvent recovery works.

Miscellaneous industries, incorporating:

- Charcoal works, Dry-cleaners

- Fibreglass and fibreglass resins manufacturing works

- Glass manufacturing works

- Photographic processing industry

- Printing and bookbinding works

APPENDIX B

Categories of Significant Harm

	Type of Receptor	Description of harm to that type of receptor that is to be regarded as significant harm
1	Human beings	<p>Death, disease, serious injury, genetic mutation, birth defects or the impairment of reproductive functions.</p> <p>For these purposes, disease is to be taken to mean any unhealthy condition of the body or a part of it and can include, for example, cancer, liver dysfunction or extensive chronic ailments. Mental dysfunction is included only insofar as it is attributable to the effects of a pollutant on the body of the person concerned.</p> <p>In this Chapter, this description of significant harm is referred to as a "human health effect".</p>
2	<p>Any ecological system, or living organism forming part of such a system, within a location which is:</p> <ul style="list-style-type: none"> • an area notified as an area of special scientific interest under section 28 of the Wildlife and Countryside Act 1981; • any land declared a national nature reserve under section 35 of that Act; • any area designated as a marine nature reserve under section 36 of that Act; • an Area of Special Protection for Birds established under section 3 of that Act; • any European Site within the meaning of regulation 10 of the Conservation (Natural Habitats etc) Regulations 1994 (i.e. Special Areas of Conservation and Special Protection Areas); • any habitat or site afforded policy protection (i.e. 	<p>Harm which results in an irreversible adverse change, or in some other substantial adverse change, in the functioning of the ecological system within any substantial part of that location.</p> <p>In determining what constitutes such harm, the local authority should have regard to the advice of Scottish Natural Heritage and to the requirements of the Conservation (Natural Habitats etc) Regulations 1994.</p> <p>In this Chapter, this description of significant harm is referred to as an "ecological system effect".</p>

	<p>candidate Special Areas of Conservation, potential Special Protection Areas and listed Ramsar sites); or</p> <ul style="list-style-type: none"> any nature reserve established under section 21 of the National Parks and Access to the Countryside Act 1949. 	
3	<p>Property in the form of:</p> <ul style="list-style-type: none"> crops, including timber; produce grown domestically, or on allotments, for consumption; livestock; other owned or domesticated animals; wild animals which are the subject of shooting or fishing rights. 	<p>For crops, a substantial diminution in yield or other substantial loss in their value resulting from death, disease or other physical damage. For domestic pets, death, serious disease or serious physical damage. For other property in this category, a substantial loss in its value resulting from death, disease or other serious physical damage.</p> <p>The local authority should regard a substantial loss in value as occurring only when a substantial proportion of the animals or crops are dead or otherwise no longer fit for their intended purpose. Food should be regarded as being no longer fit for purpose when it fails to comply with the provisions of the Food Safety Act 1990. Where a diminution in yield or loss in value is caused by a pollutant linkage, a 20% diminution or loss should be regarded as a benchmark for what constitutes a substantial diminution or loss.</p> <p>In this Chapter, this description of significant harm is referred to as an "animal or crop effect".</p>
4	<p>Property in the form of buildings.</p> <p>For this purpose, "building" has the meaning given in section 277 of the Town and Country Planning (Scotland) Act 1997 (i.e. it includes "any structure or erection, and any part of a building... but does not include plant or machinery comprised in a building").</p>	<p>Structural failure, substantial damage or substantial interference with any right of occupation.</p> <p>For this purpose, the local authority should regard substantial damage or substantial interference as occurring when any part of the building ceases to be capable of being used for the purpose for which it is or was intended.</p> <p>Additionally, in the case of a scheduled Ancient Monument, substantial damage should be regarded as occurring when the damage significantly impairs the historic, architectural, traditional, artistic or archaeological interest by reason of which the monument was scheduled.</p> <p>In this Chapter, this description of significant harm is referred to as a "building effect".</p>

APPENDIX C

Significant Possibility of Significant Harm

	Descriptions Of Significant Harm (As Defined In Table A)	Conditions For There Being A Significant Possibility Of Significant Harm
1	<p>Human health effects arising from</p> <ul style="list-style-type: none"> • the intake of a contaminant, or • other direct bodily contact with a contaminant. 	<p>If the amount of the pollutant in the pollutant linkage in question:</p> <ul style="list-style-type: none"> • which a human receptor in that linkage might take in, or • to which such a human might otherwise be exposed, <p>as a result of the pathway in that linkage, would represent an unacceptable medical risk, assessed on the basis of relevant information on the toxicological properties of that pollutant.</p> <p>Such an assessment should take into account:</p> <ul style="list-style-type: none"> • the likely total intake of, or exposure to, the substance or substances which form the pollutant, from all sources including that from the pollutant linkage in question; • the relative contribution of the pollutant linkage in question to the likely aggregate intake of, or exposure to, the relevant substance or substances; and • The duration of intake or exposure resulting from the pollutant linkage in question. <p>Toxicological properties should be taken to include carcinogenic, mutagenic, teratogenic, pathogenic, endocrine-disrupting and other similar properties.</p>
2	<p>All other human health effects (particularly by way of explosion or fire).</p>	<p>If the probability, or frequency, of occurrence of significant harm of that description is unacceptable, assessed on the basis of relevant information concerning:</p> <ul style="list-style-type: none"> • that type of pollutant linkage, or • that type of significant harm arising from other causes. <p>Such an assessment should take into account the levels of risk, which have been judged unacceptable in other similar contexts.</p>
3	<p>All ecological system effects.</p>	<p>If significant harm of that description is more likely than not to result from the pollutant linkage in question, taking into account relevant information for that type of pollutant linkage, particularly in relation to the ecotoxicological effects of the pollutant.</p>

4	All animal and crop effects.	If significant harm of that description is more likely than not to result from the pollutant linkage in question, taking into account relevant information for that type of pollutant linkage, particularly in relation to the ecotoxicological effects of the pollutant.
5	All building effects	If significant harm of that description is more likely than not to result from the pollutant linkage in question during the expected economic life of the building (or, in the case of a scheduled Ancient Monument, the foreseeable future), taking into account relevant information for that type of pollutant linkage.

APPENDIX D

Consultees for original strategy:

English Nature
Foxhold House,
Thornford
Crookham
Thatcham
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RG19 8EL



Bucks CC
County Hall
Aylesbury
Buckinghamshire



English Heritage
South East
Eastgate
195-205
Guildford
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Julie Holloway
NIMT
DEFRA
Rural Development Service
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Coley Park, Reading
Berks RG1 6DE

Dr. Patrick Miller
Contaminants Division
Food Standards Agency
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Ergon House
17 Smith Square London
SW1P 3WG.



Contaminated Land Officer
Environment Agency
Apollo Court
Bishops Square Business Park
St Albans Road
Hatfield
Hertfordshire
AL10 9EX



CDC Planning Services
CDC Engineers and Contract Management
Aylesbury Vale District Council
Wycombe District Council
South Bucks District Council
Chesham Town Council
Thames Water Utilities Limited
John Warder Portfolio Holder for Env. Management
Bucks Health Authority

The Chesham Society
Amersham Society
Chiltern Hundreds Housing Association
Dacorum Borough Council
Local Engineers
Amersham Town Council
Three Valleys Water Company
Chess Valley Historical and Archeological Society



APPENDIX E

Glossary of Terms

DEFRA Circular 02/2000 contains a detailed glossary of terms that provides legal definitions of terms that may be used in this Strategy. This Glossary provides an interpretation of terms used in the Strategy to aid reading by the layperson.

AONB

Area of Outstanding Natural Beauty

Brownfield site

A site that has been generally abandoned or underused where redevelopment is complicated by actual or perceived environmental contamination. Only a small proportion of Brownfield sites will meet the definition of contaminated land.

CDC

Chiltern District Council

CLEA

Contaminated Land Exposure Assessment, a methodology for carrying out a risk assessment

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:

- a) significant harm is being caused or there is a significant possibility of such harm being caused; or
- b) pollution of controlled waters is being, or is likely to be caused

Controlled waters

These include

- a) inland waters (river, streams, underground streams, canals, lakes and reservoirs)
- b) groundwaters (any water contained in underground strata, wells or boreholes))
- c) territorial waters (the sea within three miles of a baseline)
- d) coastal waters (the sea within the baseline up to the line of highest tide, and tidal waters up to the fresh water limit

DEFRA

Department for Environment, Food and Rural Affairs



Drinking water abstraction

The taking of water from a source (in this case, primarily an underground source) for drinking water

EA

The Environment Agency

Eco-system

A biological system of interacting organisms and their physical Environment

Executive Part of the revised political management arrangements replacing the committee system.

GIS

Geographical Information System.

Groundwater

Any water contained in underground strata, wells or boreholes

ICRCL

Interdepartmental Committee on Remediation of Contaminated Land

Part IIA

Refers to the Environmental Protection Act 1990 – Part IIA

Pathway

One or more routes by which a receptor can be exposed to a contaminant

Pollutant linkage

The relationship between a contaminant, a pathway and a receptor

Receptor

Sometimes referred to as “a target” – the health of a person, waters, ecosystem or property type that could be affected by contamination

Remediation

Generally accepted as being the carrying out of works to prevent or minimise effects of contamination. In the case of this legislation the term also encompasses assessment of the condition of land, and subsequent monitoring of the land



Risk assessment

The study of

- a) the probability, or frequency, of a hazard occurring; and
- b) the magnitude of the consequences

Source

A substance in, on or under the ground with the ability to cause harm

Source protection zone

Protection zones around certain sources of groundwater used for public water supply. Within these zones, certain activities and processes are prohibited or restricted.

SPA

Special Protection Area for birds

Special site

Any contaminated land designated due to the presence of:

- Waste acid tar lagoons
- Oil refining
- Explosives
- Integrated pollution control sites
- Nuclear sites

SSSI

Site of Special Scientific Interest.

USEPA

United States Environmental Protection Agency



APPENDIX F

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